Patent Law
http://www.patentlaw.com

53. The plant cell of claim 52, wherein said fourth coding sequence comprises at least a portion of the nucleotide sequence set forth in SEQ ID NO: 24.

54. The plant cell of claim 52 further comprising in its genome a fifth DNA construct comprising a promoter that drives expression in a plant cell operably linked to a fifth coding sequence, wherein said fifth coding sequence encodes an NADH kinase or an NAD$^+$ kinase and said fifth coding sequence is operably linked to a nucleotide sequence encoding a peroxisome-targeting signal.

55. The plant cell of claim 54, wherein said fifth coding sequence comprises at least a portion of a nucleotide sequence selected from the group consisting of SEQ ID NOs: 25-27.

56. A plant cell genetically manipulated to produce polyhydroxyalkanoate in its peroxisomes, said plant cell comprising in its genome:

a stably integrated first DNA construct comprising a promoter that drives expression in a plant cell operably linked to a first coding sequence, wherein said first coding sequence encodes a polyhydroxyalkanoate synthase and is operably linked to a nucleotide sequence encoding a peroxisome-targeting signal;

a stably integrated second DNA construct comprising a promoter that drives expression in a plant cell operably linked to a second coding sequence, wherein said second coding sequence encodes an acetyl-CoA:acetyl transferase and is operably linked to a nucleotide sequence encoding a peroxisome-targeting signal; and

a stably integrated third DNA construct comprising a promoter that drives expression in a plant cell operably linked to a third coding sequence, wherein said third coding sequence is operably linked to a nucleotide sequence encoding a peroxisome-targeting signal and said third coding sequence is selected from the group consisting of:

(a) a nucleotide sequence encoding a 3-ketoacyl-CoA reductase that is capable of utilizing NADH;

(b) a nucleotide sequence set forth in SEQ ID NO: 3;

(c) a nucleotide sequence set forth in SEQ ID NO: 22;

Patent Lens

(d) the nucleotide sequence set forth in SEQ ID NO: 1;

(e) a nucleotide sequence encoding a multifunctional protein-2, wherein the hydratase activity of said multifunctional protein has been eliminated; and

(f) the nucleotide sequence set forth in SEQ ID NO: 6.

57. The plant cell of claim 56, wherein said second coding sequence comprises at least a portion of the nucleotide sequence set forth in SEQ ID NO: 24.

58. A plant cell genetically manipulated for the synthesis in its peroxisomes of at least one intermediate molecule in polyhydroxyalkanoate synthesis, said plant cell comprising in its genome at least one stably incorporated DNA construct comprising a coding sequence for an enzyme involved in the synthesis of said intermediate molecule, said coding sequence operably linked to a promoter that drives expression in a plant cell and to a nucleotide sequence encoding a peroxisome-targeting signal, wherein said coding sequence is selected from the group consisting of:

(a) a nucleotide sequence encoding a 2-enoyl-CoA hydratase that is capable of catalyzing the synthesis of R-(-)-3-hydroxyacyl-CoA ;

(b) a nucleotide sequence set forth in SEQ ID NO: 21;

(c) a nucleotide sequence comprising the 2-enoyl-CoA hydratase domain of a multifunctional protein-2,

(d) a nucleotide sequence set forth in SEQ ID NO: 4;

(e) a nucleotide sequence set forth in SEQ ID NO: 1;

(f) a nucleotide sequence encoding a multifunctional protein-2, wherein the dehydrogenase activity of said multifunctional protein has been eliminated; and

(g) a nucleotide sequence encoding a 3-ketoacyl-CoA reductase that is capable of utilizing NADH;

(h) a nucleotide sequence set forth in SEQ ID NO: 3;

(i) a nucleotide sequence set forth in SEQ ID NO: 22;

(j) the nucleotide sequence set forth in SEQ ID NO: 1;

Patent Lens

http://www.patentlens.net/

(k) a nucleotide sequence encoding a multifunctional protein-2, wherein the hydratase activity of said multifunctional protein has been eliminated; and

(l) the nucleotide sequence set forth in SEQ ID NO: 6.

59. The plant cell of claim 58, wherein said intermediate molecule is an R-(-)-3-hydroxyacyl-CoA or a 3-ketoacyl-CoA.

Patent Lens

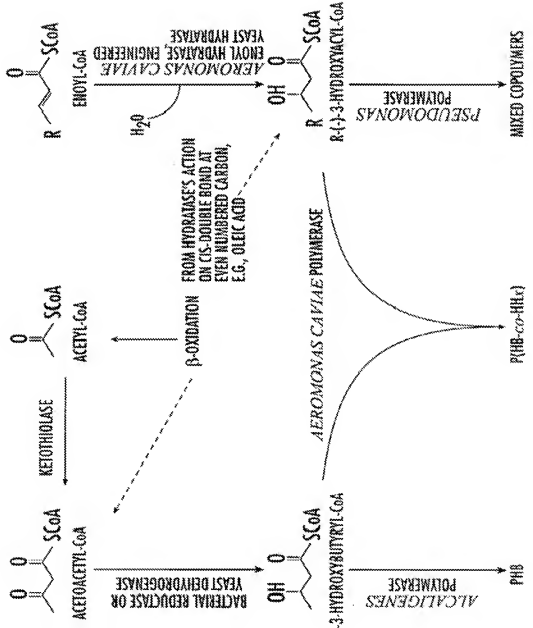

FIG. 1

Patent Laws

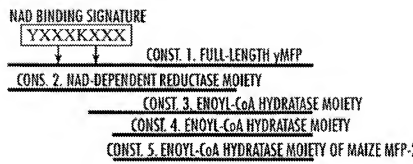

FIG. 2.

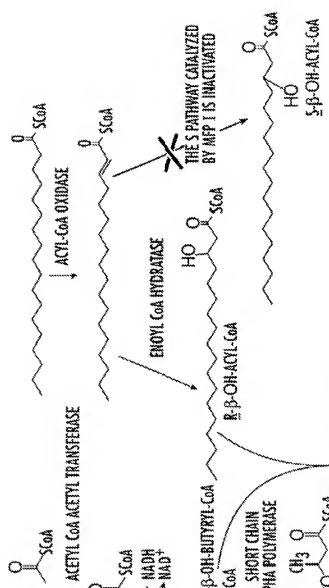
ACETYL CoA ACETYL TRANSFERASE
β KETOACYL REDUCTASE
NADH
NAD+
R-β-OH-BUTYRYL-CoA
SHORT CHAIN PHA POLYMERASE
ACYL-CoA OXIDASE
ENOYL CoA HYDRATASE
THE S PATHWAY CATALYZED BY MFP 1 IS INACTIVATED
R-β-OH-ACYL-CoA
S-β-OH-ACYL-CoA
MIXED SIDE CHAIN PHA POLYMERASE

FIG. 2.

Patent Lens

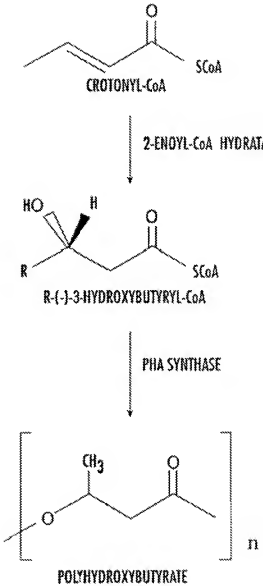

FIG. 4.

Patent Lens

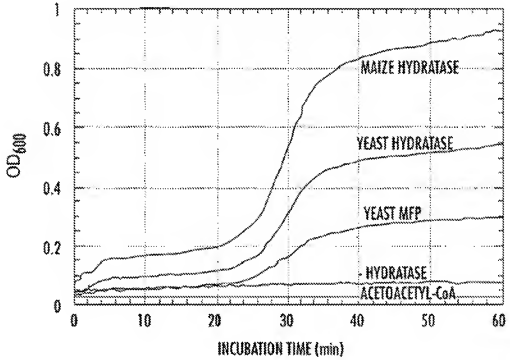

FIG. 5.

Patent Lens
Powered by CAS INNOVATION

http://www.patentlens.net/

SEQUENCE LISTING

<110> Nichols, Scott E
Li, Chun Ping
Dong, Jian G
Hitz, William D
Liebergesell, Matthias
Dhugga, Kanwarpal S
Briggs, Kristen K

<120> PRODUCTION OF POLYHYDROXYALKANOATE IN PLANTS

<130> 5718-82-1-PC

<140>
<141>

<150> 60/156807
<151> 1999-09-29

<160> 27

<170> PatentIn Ver. 2.1

<210> 1
<211> 1362
<212> DNA
<213> Zea mays

<220>
<221> CDS
<222> (233)..(1174)

<400> 1
gaattcccgg gtcgacccac gcgtccggtc ggcgggggctg ccgcctgccg catcctcccc 60

tcgcccaccg tcgacgactt gatcgcctcc caccgttgag gcgcgctcct cacggcagcg 120

agccagcgac tcctctcttc gtctcctaca agtagccaga cacgcactcg actttgccgg 180

caaccngtcg acagcgacga ggcgcagcat aaggcatacg ggcacggcgg cc atg gcg 238
Met Ala
1

acc agc tcc aaa ccc gcc gcg ccc gtg gac ccc atg gtc gtg ctc gcc 286
Thr Ser Ser Lys Pro Ala Ala Pro Val Asp Pro Met Val Val Leu Ala
5 10 15

cac gag ttc ccc gag gtg tcs ttc gac tac gac gag agg gat gta gcg 334
His Glu Phe Pro Glu Val Ser Phe Asp Tyr Asp Glu Arg Asp Val Ala
20 25 30

ttg tac gcg ctc ggg gtt ggt gcc tgc ggc gat gac gcc gtc gac gag 382
Leu Tyr Ala Leu Gly Val Gly Ala Cys Gly Asp Asp Ala Val Asp Glu
35 40 45 50

aag gag ctt cac ttc gtg tac cac agg gat ggg cag cca cac att aag 430
Lys Glu Leu His Phe Val Tyr His Arg Asp Gly Gln Pro His Ile Lys
55 60 65

Patent Lens
http://www.patentlens.net/


```
acc ctt cct act ttt gtt tct tta ttt ccc aac aag aac agc aat ggg   478
Thr Leu Pro Thr Phe Val Ser Leu Phe Pro Asn Lys Asn Ser Asn Gly
                70                  75                  80

ctt gga ttt gtt gat gtg cct ggc ctt aac ttt gat gca agc ctt cta   526
Leu Gly Phe Val Asp Val Pro Gly Leu Asn Phe Asp Ala Ser Leu Leu
            85                  90                  95

ctg cat ggt caa caa tac ata gag atc tat agg cca atc cct tcg tat   574
Leu His Gly Gln Gln Tyr Ile Glu Ile Tyr Arg Pro Ile Pro Ser Tyr
        100                 105                 110

gtc agt gtt gta aac agg gtt aaa gta gtt ggt ttg cac gac aag ggg   622
Val Ser Val Val Asn Arg Val Lys Val Val Gly Leu His Asp Lys Gly
    115                 120                 125                 130

aaa gca act att ctt gag ctc gaa act acc aca agc ctc aaa gag tca   670
Lys Ala Thr Ile Leu Glu Leu Glu Thr Thr Thr Ser Leu Lys Glu Ser
                135                 140                 145

ggg gaa att tta tgc atg aac agg agt act atc tac ttg cgt ggt gct   718
Gly Glu Ile Leu Cys Met Asn Arg Ser Thr Ile Tyr Leu Arg Gly Ala
            150                 155                 160

gga ggg ttt tca gac tct tca cgg cca tac tca tat gct acc tat cct   766
Gly Gly Phe Ser Asp Ser Ser Arg Pro Tyr Ser Tyr Ala Thr Tyr Pro
        165                 170                 175

gct aat caa gtt tct cgc att tct att cca aat tcg gca cct tct gca   814
Ala Asn Gln Val Ser Arg Ile Ser Ile Pro Asn Ser Ala Pro Ser Ala
    180                 185                 190

gta tgc gac gac cag aca aag caa tcc cag gca ttg tta tac agg cta   862
Val Cys Asp Asp Gln Thr Lys Gln Ser Gln Ala Leu Leu Tyr Arg Leu
195                 200                 205                 210

tct ggg gat tac aat cct ttg cat tca gac cca gat att gca cag ctt   910
Ser Gly Asp Tyr Asn Pro Leu His Ser Asp Pro Asp Ile Ala Gln Leu
                215                 220                 225

gct gga ttc acc cgt cca atc ctg cac ggc ctc tgc acc cta gga ttc   958
Ala Gly Phe Thr Arg Pro Ile Leu His Gly Leu Cys Thr Leu Gly Phe
            230                 235                 240

gct gct cgc gcc gtc ata aaa tct ttc tgc aac ggc gaa ccg act gcg   1006
Ala Ala Arg Ala Val Ile Lys Ser Phe Cys Asn Gly Glu Pro Thr Ala
        245                 250                 255

gtg aag agc atc ttc ggc cgt ttc ctt ctg cac gtc tac ccc ggg gaa   1054
Val Lys Ser Ile Phe Gly Arg Phe Leu Leu His Val Tyr Pro Gly Glu
    260                 265                 270

acg ttg tcc act gag atg tgg ctt gac ggc cag aag gtg cac tac caa   1102
Thr Leu Ser Thr Glu Met Trp Leu Asp Gly Gln Lys Val His Tyr Gln
275                 280                 285                 290

acg aaq gcc aag gag cgg aac cga gct gtc ctc tct gga tat gtg ttg   1150
Thr Lys Ala Lys Glu Arg Asn Arg Ala Val Leu Ser Gly Tyr Val Leu
                295                 300                 305
```

Patent Law
http://www.patentlaw.com

ctc cag cac atc ccc tcg tca ttg taagtaaaag ttttgtttct tacaattggt 1204
Leu Gln His Ile Pro Ser Ser Leu
310

gcccgctgaa agcatttggc ttggctgtga taaattgagc acgaggtggg ctgccactgt 1264

aatgatagcc atgtatgggt ctgcacataa cacattcgta ctgtattgat aagaagcacg 1324

taccacttaa atacgcagat ccgaacgtct tgatttttt 1362

<210> 2
<211> 314
<212> PRT
<213> Zea mays

<400> 2
Met Ala Thr Ser Ser Lys Pro Ala Ala Pro Val Asp Pro Met Val Val
1 5 10 15

Leu Ala His Glu Phe Pro Glu Val Ser Phe Asp Tyr Asp Glu Arg Asp
20 25 30

Val Ala Leu Tyr Ala Leu Gly Val Gly Ala Cys Gly Asp Asp Ala Val
35 40 45

Asp Glu Lys Glu Leu His Phe Val Tyr His Arg Asp Gly Gln Pro His
50 55 60

Ile Lys Thr Leu Pro Thr Phe Val Ser Leu Phe Pro Asn Lys Asn Ser
65 70 75 80

Asn Gly Leu Gly Phe Val Asp Val Pro Gly Leu Asn Phe Asp Ala Ser
85 90 95

Leu Leu Leu His Gly Gln Gln Tyr Ile Glu Ile Tyr Arg Pro Ile Pro
100 105 110

Ser Tyr Val Ser Val Val Asn Arg Val Lys Val Val Gly Leu His Asp
115 120 125

Lys Gly Lys Ala Thr Ile Leu Glu Leu Glu Thr Thr Thr Ser Leu Lys
130 135 140

Glu Ser Gly Glu Ile Leu Cys Met Asn Arg Ser Thr Ile Tyr Leu Arg
145 150 155 160

Gly Ala Gly Gly Phe Ser Asp Ser Ser Arg Pro Tyr Ser Tyr Ala Thr
165 170 175

Tyr Pro Ala Asn Gln Val Ser Arg Ile Ser Ile Pro Asn Ser Ala Pro
180 185 190

Ser Ala Val Cys Asp Asp Gln Thr Lys Gln Ser Gln Ala Leu Leu Tyr
195 200 205

Arg Leu Ser Gly Asp Tyr Asn Pro Leu His Ser Asp Pro Asp Ile Ala
210 215 220

Gln Leu Ala Gly Phe Thr Arg Pro Ile Leu His Gly Leu Cys Thr Leu

Patent Law
machine translation

http://www.patentlaw.com


```
225                 230                 235                 240

Gly Phe Ala Ala Arg Ala Val Ile Lys Ser Phe Cys Asn Gly Glu Pro
                245                 250                 255

Thr Ala Val Lys Ser Ile Phe Gly Arg Phe Leu Leu His Val Tyr Pro
            260                 265                 270

Gly Glu Thr Leu Ser Thr Glu Met Trp Leu Asp Gly Gln Lys Val His
        275                 280                 285

Tyr Gln Thr Lys Ala Lys Glu Arg Asn Arg Ala Val Leu Ser Gly Tyr
    290                 295                 300

Val Leu Leu Gln His Ile Pro Ser Ser Leu
305                 310
```

<210> 3
<211> 3252
<212> DNA
<213> Saccharomyces cerevisiae

<400> 3

```
tagaaactctc ggcggttatt tgccaatttt tactccaacg gggatcaaca tcaagcaagaa 60
agcaaaaggag gatgggggtaa aaaaacaagg aagacaagta aagaaattat ataagaagtc 120
gtttctggct gctttactcc cagtgttgaa aggtagaagg acttatcagc taatttattA 180
agcaaggtac acatatacga gctaaacaaa cattcgattt attcttatt tgagtaagcc 240
atgcctggaa atttatcctt caaagataga gttgttgtaa tcacgggcgc tggagggggc 300
ttaggtaagg tgtatgcact agcttacgca agcagaggtg caaaagtggt cgtcaatgat 360
ctaggtggca ctttgggtgg ttcaggacat aactccaaag ctgcagactt agtggtggat 420
gagataaaaa aagccggagc tatagctgtg gcaaattacg actctgttaa tgaaaatgga 480
gagaaaataa ttgaaaaggc tataaaagaa ttcggcaggg ttgatgtact aattaacaac 540
gctggaatat taagggatgt ttcotttgca aagatgacag aacgtgagtt tgcatctgtg 600
gtagatgttc atttgacagg tggctataag cratggcgtg ctgcttggcc ttatatgcgc 660
tctcagaaat ttggtagaat cattaacacc gctttcccctg ccggtctatt tggaaatttt 720
ggtcaagcta attattcagc agctaaaatg ggcttagttg gttttggcga aaccctcgcg 780
aaggagggtg ccaaatacaa cattaatgtt aattcaattg cgccsttggc tagatcacgt 840
atgacagaaa acgtgttacc accacatatc ttgaaacagt taggaccgga aaaaattgtt 900
ccctiagtac tctatttgac acacgaaagt acgaaagtgt caaactccat ttttgaactc 960
gctgctggat tctttggaca gctcagatgg gagaggtctt ctggacaaat tttcaatcca 1020
gaccccaaga catatactcc tgaagcaatt ttaaataagt ggaaggaaat cacagactat 1080
agggacaagc catttaacaa aactcagcat ccatatcaac tctcggatta taatgatttta 1140
atcaccaaag caaaaaaatt accrcccaat gaacaaggct cagtgaaaat caagtcgctt 1200
tgcaacaaag tcgtagtagt tacggctgca ggaggtggtc ttgggaagtc tcatgcaatc 1260
tggttttgcac ggtacggtgc gaaggtagtt gtaaatgaca tcaaggatcc tttttcagtt 1320
gttgaagaaa taaataaact atatggtgaa ggcacagcca ttccagattc ccatgatgtg 1380
gtcaccgaag ctcctctcat tatccaiact gcaatcaagta agtttcagag agtagacatc 1440
ttggtcaata acgctggtat tttgcgtgac aaatcttttt taaaaatgaa agatgaggaa 1500
tggtttgctg tcctgaaagt ccacctttttt tccacatttt catrgtcaaa agcagtatgg 1560
ccaatattta ccaaacaaaa gtctggattt attatcaata ctacttctac ctcaaggaatt 1620
tatggtaatt ttggacaggc caattatgcc gctgcaaaag ccgccatttt aggattcagt 1680
aaaactattg cactggaagg tgccaagcga ggaattattg ttaatgttat cgctccrcat 1740
gcagaaacgg ctatgacaaa gactstattc tcggagaagg aatratcaaa ccacttttgat 1800
gcatctcaag tctcccact tgttgttttg ttggcatctg aagaactaca aaagtattct 1860
ggaagaaggg ttattggcca attattcgaa gttggcggtg gttggtgtgg gcaaaccaga 1920
tggcaaagaa gttccggtta tgttictatt aaagagacta ttgaaccgga agaaattaaa 1980
gaaaattgga accacatcac tgatttcagt cgcaaacact tcaaccggag ctccacagag 2040
gagtcttcta tggcaaccct gcaagccgtg caaaaagcgc actcttcaaa ggagttggat 2100
```

Patent Law
changing innovation

http://www.uspto.gov

gatggattat tcaagtacac taccaaggar tgtatcttgt acaatttagg acttggatgc 2160
acaagcaaag agcttaagta cacctacgag aatgatccag acttccaagt tttgccnacg 2220
ttagccgtca ttccatttat gcaagctact gccacactag ctatggacaa tttagtcgat 2280
aacttcaatt atgcaatgtt actgcatgga gaacaatatt ttaagctctg cacgccgaca 2340
atgccaagta atggaactct aaagacactt gctaaaacct tacaagtact tgacaagaat 2400
ggtaaagccg ctttagttgt tggtggcttc gaaacttatg acattaaaac taagaaactc 2460
atagcttata acgaaggatc gttcttcatc aggggcgcac atgtacctcc agaaaagtga 2520
gtgaggggatg ggaaaagagc caagtttgct gtccaaaatt ttgaagtgcc acatggaaag 2580
gtaccagatt ttgaggcgga gatttctacg aataaagatc aagccgcatt gtacaggtta 2640
tctggcgatt tcaatccttt acatatcgat cccacgctag ccaaagcagt taaatttcct 2700
acgccaattc tgcatgggct ttgtacatta ggtattagtg cgaaagcatt gtttgaacat 2760
tatggtccat atgaggagtt gaaagtgaga tttaccaatg ttgtttttcc aggtgatact 2820
ctaaaggtta aagcttggaa gcaaggctcg gttgtcgttt ttcaaaacaat tgataccgacc 2880
agaaacgtca ttgtattgga taacgccgct gtaaaactat cgcaggcaaa atctaaacta 2940
tastacaaaa aaagatttga ataatataaa aaatagcgat tatattcttt tcatttaaca 3000
gctttgttaa gccatatcct tacatacatc tttcctaca tsactaacct acccatttta 3060
agtacttttt ctttacggac gcaacttttt tgtcatgtgt aatattaaca gttttaatct 3120
atatagagga agaggatgga taatattaca aagtgtatat aggttgtata tagatacatg 3180
catatgatgg gaagactatg aagagagaga tagtcatcat ggtaagacat ttatcnagaa 3240
attcatgaat tc 3252

<210> 4
<211> 1566
<212> DNA
<213> Saccharomyces cerevisiae

<220>
<221> CDS
<222> (1)..(1563)

<220>
<223> Nucleotides 4-1566 of SEQ ID NO: 4 corresponds
to nucleotides 1381-2943 of SEQ ID NO: 3.

<400> 4

atg	gtc	acc	gaa	gct	cct	ctc	att	atc	caa	act	gca	ara	agt	aag	ttt	48
Met	Val	Thr	Glu	Ala	Pro	Leu	Ile	Ile	Gln	Thr	Ala	Ile	Ser	Lys	Phe	
1			5					10					15			
cag	aga	gta	gac	atc	ttg	gtc	aat	aac	gct	ggt	att	ttg	cgt	gac	aaa	96
Gln	Arg	Val	Asp	Ile	Leu	Val	Asn	Asn	Ala	Gly	Ile	Leu	Arg	Asp	Lys	
			20					25					30			
tct	ttt	tta	aaa	atg	aaa	gat	gag	gaa	tgg	ttt	gct	gtc	ctg	aaa	gtc	144
Ser	Phe	Leu	Lys	Met	Lys	Asp	Glu	Glu	Trp	Phe	Ala	Val	Leu	Lys	Val	
		35					40					45				
cac	ctt	ttt	tcc	aca	ttt	tca	ttg	tca	aaa	gca	gta	tgg	cca	ata	ttt	192
His	Leu	Phe	Ser	Thr	Phe	Ser	Leu	Ser	Lys	Ala	Val	Trp	Pro	Ile	Phe	
	50					55					60					
acc	aaa	caa	aag	tct	gga	ttt	att	atc	aat	acr	act	tct	acc	tca	gga	240
Thr	Lys	Gln	Lys	Ser	Gly	Phe	Ile	Ile	Asn	Thr	Thr	Ser	Thr	Ser	Gly	
65					70					75					80	
att	tat	ggt	aat	ttt	gga	cag	gcn	aat	tat	gcc	gct	gca	aaa	gcc	gcc	288
Ile	Tyr	Gly	Asn	Phe	Gly	Gln	Ala	Asn	Tyr	Ala	Ala	Ala	Lys	Ala	Ala	
				85					90					95		

Patent Laws
visualizing innovation

http://www.patentlaws.net/


```
att tta gga ttc agt aaa act att gca ctg gaa ggt gcc aag aga gga   336
Ile Leu Gly Phe Ser Lys Thr Ile Ala Leu Glu Gly Ala Lys Arg Gly
            100                 105                 110

att att gtt aat gtt atc gct cct cat gca gaa acg gct atg aca aag   384
Ile Ile Val Asn Val Ile Ala Pro His Ala Glu Thr Ala Met Thr Lys
        115                 120                 125

act ata ttc tcg gag aag gaa tta tca aac cac ttt gat gca tct caa   432
Thr Ile Phe Ser Glu Lys Glu Leu Ser Asn His Phe Asp Ala Ser Gln
    130                 135                 140

gtc tcc cca ctt gtt gtt ttg ttg gca tct gaa gaa cta caa aag tat   480
Val Ser Pro Leu Val Val Leu Leu Ala Ser Glu Glu Leu Gln Lys Tyr
145                 150                 155                 160

tct gga aga agg gtt att ggc caa tta ttc gaa gtt ggc ggt ggt tgg   528
Ser Gly Arg Arg Val Ile Gly Gln Leu Phe Glu Val Gly Gly Gly Trp
                165                 170                 175

tgt ggg caa acc aga tgg caa aga agt tcc ggt tat gtt tct att aaa   576
Cys Gly Gln Thr Arg Trp Gln Arg Ser Ser Gly Tyr Val Ser Ile Lys
            180                 185                 190

gag act att gaa ccg gaa gaa att aaa gaa aat tgg aac cac atc act   624
Glu Thr Ile Glu Pro Glu Glu Ile Lys Glu Asn Trp Asn His Ile Thr
        195                 200                 205

gat ttc agt cgc aac act atc aac ccg agc tcc aca gag gag tct tct   672
Asp Phe Ser Arg Asn Thr Ile Asn Pro Ser Ser Thr Glu Glu Ser Ser
    210                 215                 220

atg gca acc ttg caa gcc gtg caa aaa gcg cac tct tca aag gag ttg   720
Met Ala Thr Leu Gln Ala Val Gln Lys Ala His Ser Ser Lys Glu Leu
225                 230                 235                 240

gat gat gga tta ttc aag tac act acc aag gat tgt atc ttg tac aat   768
Asp Asp Gly Leu Phe Lys Tyr Thr Thr Lys Asp Cys Ile Leu Tyr Asn
                245                 250                 255

tta gga ctt gga tgc aca agc aaa gag ctt aag tac acc tac gag aat   816
Leu Gly Leu Gly Cys Thr Ser Lys Glu Leu Lys Tyr Thr Tyr Glu Asn
            260                 265                 270

gat cca gac ttc caa gtt ttg ccc acg ttc gcc gtc att cca ttt atg   864
Asp Pro Asp Phe Gln Val Leu Pro Thr Phe Ala Val Ile Pro Phe Met
        275                 280                 285

caa gct act gcc aca cta gct atg gac aat tta gtc gat aac ttc aat   912
Gln Ala Thr Ala Thr Leu Ala Met Asp Asn Leu Val Asp Asn Phe Asn
    290                 295                 300

tat gca atg tta ctg cat gga gaa caa tat ttt aag ctc tgc acg ccg   960
Tyr Ala Met Leu Leu His Gly Glu Gln Tyr Phe Lys Leu Cys Thr Pro
305                 310                 315                 320

aca atg cca agt aat gga act cta aag aca ctt gct aaa cct tta caa  1008
Thr Met Pro Ser Asn Gly Thr Leu Lys Thr Leu Ala Lys Pro Leu Gln
                325                 330                 335
```

Patent Laws
changing innovation

http://www.uspto.gov


```
gta ctt gac aag aat ggt aaa gcc gct tta gtt gtt ggt ggc ttc gaa   1056
Val Leu Asp Lys Asn Gly Lys Ala Ala Leu Val Val Gly Gly Phe Glu
            340                 345                 350

act tat gac att aaa act aag aaa ctc ata gct tat aac gaa gga tcg   1104
Thr Tyr Asp Ile Lys Thr Lys Lys Leu Ile Ala Tyr Asn Glu Gly Ser
        355                 360                 365

ttc ttc atc agg ggc gca cat gta cct cca gaa aag gaa gtg agg gat   1152
Phe Phe Ile Arg Gly Ala His Val Pro Pro Glu Lys Glu Val Arg Asp
    370                 375                 380

ggg aaa aga gcc aag ttt gct grc caa aat ttt gaa gtg cca cat gga   1200
Gly Lys Arg Ala Lys Phe Ala Val Gln Asn Phe Glu Val Pro His Gly
385                 390                 395                 400

aag gta cca gat ttt gag gcg gag att tct acg aat aaa gat caa gcc   1248
Lys Val Pro Asp Phe Glu Ala Glu Ile Ser Thr Asn Lys Asp Gln Ala
                405                 410                 415

gca ttg tac agg tta tct ggc gat ttc aat cct tta cat atc gat ccc   1296
Ala Leu Tyr Arg Leu Ser Gly Asp Phe Asn Pro Leu His Ile Asp Pro
            420                 425                 430

acg cta gcc aaa gca gtt aaa ttt cct acg cca att ctg cat ggg ctt   1344
Thr Leu Ala Lys Ala Val Lys Phe Pro Thr Pro Ile Leu His Gly Leu
        435                 440                 445

tgt aca tta ggt att agt gcg aaa gca ttg ttt gaa cat tat ggt cca   1392
Cys Thr Leu Gly Ile Ser Ala Lys Ala Leu Phe Glu His Tyr Gly Pro
    450                 455                 460

tat gag gag ttg aaa gtg aga ttt acc aat gtt gtt ttc cca ggt gat   1440
Tyr Glu Glu Leu Lys Val Arg Phe Thr Asn Val Val Phe Pro Gly Asp
465                 470                 475                 480

act cta aag gtt aaa gct tgg aag caa ggc tcg gtt grc gtt ttr caa   1488
Thr Leu Lys Val Lys Ala Trp Lys Gln Gly Ser Val Val Val Phe Gln
                485                 490                 495

aca att gat acg acc aga aac gtc att gta ttg gat aac gcc gct gta   1536
Thr Ile Asp Thr Thr Arg Asn Val Ile Val Leu Asp Asn Ala Ala Val
            500                 505                 510

aaa cta tcg cag gca aaa tct aaa gta taa                           1566
Lys Leu Ser Gln Ala Lys Ser Lys Leu
        515                 520
```

<210> 5
<211> 521
<212> PRT
<213> Saccharomyces cerevisiae
<223> Nucleotides 4-1566 of SEQ ID NO: 4 corresponds to nucleotides 1381-2943 of SEQ ID NO: 3.

<400> 5

```
Met Val Thr Glu Ala Pro Leu Ile Ile Gln Thr Ala Ile Ser Lys Phe
  1                 5                  10                  15
```

Patent Law
http://www.patentlaw.com


```
Gln Arg Val Asp Ile Leu Val Asn Asn Ala Gly Ile Leu Arg Asp Lys
                20                  25                  30

Ser Phe Leu Lys Met Lys Asp Glu Glu Trp Phe Ala Val Leu Lys Val
            35                  40                  45

His Leu Phe Ser Thr Phe Ser Leu Ser Lys Ala Val Trp Pro Ile Phe
        50                  55                  60

Thr Lys Gln Lys Ser Gly Phe Ile Ile Asn Thr Thr Ser Thr Ser Gly
65                  70                  75                  80

Ile Tyr Gly Asn Phe Gly Gln Ala Asn Tyr Ala Ala Ala Lys Ala Ala
                85                  90                  95

Ile Leu Gly Phe Ser Lys Thr Ile Ala Leu Glu Gly Ala Lys Arg Gly
            100                 105                 110

Ile Ile Val Asn Val Ile Ala Pro His Ala Glu Thr Ala Met Thr Lys
        115                 120                 125

Thr Ile Phe Ser Glu Lys Glu Leu Ser Asn His Phe Asp Ala Ser Gln
    130                 135                 140

Val Ser Pro Leu Val Val Leu Leu Ala Ser Glu Glu Leu Gln Lys Tyr
145                 150                 155                 160

Ser Gly Arg Arg Val Ile Gly Gln Leu Phe Glu Val Gly Gly Gly Trp
                165                 170                 175

Cys Gly Gln Thr Arg Trp Gln Arg Ser Ser Gly Tyr Val Ser Ile Lys
            180                 185                 190

Glu Thr Ile Glu Pro Glu Glu Ile Lys Glu Asn Trp Asn His Ile Thr
        195                 200                 205

Asp Phe Ser Arg Asn Thr Ile Asn Pro Ser Ser Thr Glu Glu Ser Ser
    210                 215                 220

Met Ala Thr Leu Gln Ala Val Gln Lys Ala His Ser Ser Lys Glu Leu
225                 230                 235                 240

Asp Asp Gly Leu Phe Lys Tyr Thr Thr Lys Asp Cys Ile Leu Tyr Asn
                245                 250                 255

Leu Gly Leu Gly Cys Thr Ser Lys Glu Leu Lys Tyr Thr Tyr Glu Asn
            260                 265                 270

Asp Pro Asp Phe Gln Val Leu Pro Thr Phe Ala Val Ile Pro Phe Met
        275                 280                 285

Gln Ala Thr Ala Thr Leu Ala Met Asp Asn Leu Val Asp Asn Phe Asn
    290                 295                 300

Tyr Ala Met Leu Leu His Gly Glu Gln Tyr Phe Lys Leu Cys Thr Pro
305                 310                 315                 320

Thr Met Pro Ser Asn Gly Thr Leu Lys Thr Leu Ala Lys Pro Leu Gln
                325                 330                 335
```

Patent Law

http://www.patentlaw.com/


```
Val Leu Asp Lys Asn Gly Lys Ala Ala Leu Val Val Gly Gly Phe Glu
            340                 345                 350

Thr Tyr Asp Ile Lys Thr Lys Lys Leu Ile Ala Tyr Asn Glu Gly Ser
        355                 360                 365

Phe Phe Ile Arg Gly Ala His Val Pro Pro Glu Lys Glu Val Arg Asp
    370                 375                 380

Gly Lys Arg Ala Lys Phe Ala Val Gln Asn Phe Glu Val Pro His Gly
385                 390                 395                 400

Lys Val Pro Asp Phe Glu Ala Glu Ile Ser Thr Asn Lys Asp Gln Ala
                405                 410                 415

Ala Leu Tyr Arg Leu Ser Gly Asp Phe Asn Pro Leu His Ile Asp Pro
            420                 425                 430

Thr Leu Ala Lys Ala Val Lys Phe Pro Thr Pro Ile Leu His Gly Leu
        435                 440                 445

Cys Thr Leu Gly Ile Ser Ala Lys Ala Leu Phe Glu His Tyr Gly Pro
    450                 455                 460

Tyr Glu Glu Leu Lys Val Arg Phe Thr Asn Val Val Phe Pro Gly Asp
465                 470                 475                 480

Thr Leu Lys Val Lys Ala Trp Lys Gln Gly Ser Val Val Val Phe Gln
                485                 490                 495

Thr Ile Asp Thr Thr Arg Asn Val Ile Val Leu Asp Asn Ala Ala Val
            500                 505                 510

Lys Leu Ser Gln Ala Lys Ser Lys Leu
        515                 520


<210> 6
<211> 1887
<212> DNA
<213> Saccharomyces cerevisiae

<220>
<221> CDS
<222> (1)..(1887)

<220>
<223> Nucleotides 1-1887 of SEQ ID NO: 6  corresponds
      to nucleotides 241- 2127  of SEQ ID NO: 3.

<400> 6
atg cct gga aat tta tcc ttc aaa gat aga gtt gtt gta atc acg ggc   48
Met Pro Gly Asn Leu Ser Phe Lys Asp Arg Val Val Val Ile Thr Gly
  1               5                  10                  15

gct gga ggg ggc tta ggt aag gtg tat gca cta gct tac gca agc aga   96
Ala Gly Gly Gly Leu Gly Lys Val Tyr Ala Leu Ala Tyr Ala Ser Arg
            20                  25                  30
```

Patent Laws
changing innovation

http://www.patentlaws.com/


```
ggt gca aaa gtg gtc gtc aat gat cta ggt ggc act ttg ggt ggt tca   144
Gly Ala Lys Val Val Val Asn Asp Leu Gly Gly Thr Leu Gly Gly Ser
          35                  40                  45

gga cat aac tcc aaa gct gca gac tta gtg gtg gat gag ata aaa aaa   192
Gly His Asn Ser Lys Ala Ala Asp Leu Val Val Asp Glu Ile Lys Lys
      50                  55                  60

gcc gga ggt ata gct gtg gca aat tac gac tct gtt aat gaa aat gga   240
Ala Gly Gly Ile Ala Val Ala Asn Tyr Asp Ser Val Asn Glu Asn Gly
  65                  70                  75                  80

gag aaa ata att gaa acg gct ata aaa gaa ttc ggc agg gtt gat gta   288
Glu Lys Ile Ile Glu Thr Ala Ile Lys Glu Phe Gly Arg Val Asp Val
                  85                  90                  95

cta att aac aac gct gga ata tta agg gat gtt tca ttt gca aag atg   336
Leu Ile Asn Asn Ala Gly Ile Leu Arg Asp Val Ser Phe Ala Lys Met
             100                 105                 110

aca gaa cgt gag ttt gca tct gtg gta gat gtt cat ttg aca ggt ggc   384
Thr Glu Arg Glu Phe Ala Ser Val Val Asp Val His Leu Thr Gly Gly
         115                 120                 125

tat aaa cta tcg cgt gct gct tgg cct tat atg cgc tct cag aaa ttt   432
Tyr Lys Leu Ser Arg Ala Ala Trp Pro Tyr Met Arg Ser Gln Lys Phe
     130                 135                 140

ggt aga atc att aac acc gct tcc cct gcc ggt cta ttt gga aat ttt   480
Gly Arg Ile Ile Asn Thr Ala Ser Pro Ala Gly Leu Phe Gly Asn Phe
 145                 150                 155                 160

ggt caa gct aat tat tca gca gct aaa atg ggc tta gtt ggt ttg gcg   528
Gly Gln Ala Asn Tyr Ser Ala Ala Lys Met Gly Leu Val Gly Leu Ala
                 165                 170                 175

gaa acc ctc gcg aag gag ggt gcc aaa tac aac att aat gtt aat tca   576
Glu Thr Leu Ala Lys Glu Gly Ala Lys Tyr Asn Ile Asn Val Asn Ser
            180                 185                 190

att gcg cca ttg gct aga tca cgt atg aca gaa aac gtg tta cca cca   624
Ile Ala Pro Leu Ala Arg Ser Arg Met Thr Glu Asn Val Leu Pro Pro
        195                 200                 205

cat atc ttg aaa cag tta gga ccg gaa aaa att gtt ccc tta gta ctc   672
His Ile Leu Lys Gln Leu Gly Pro Glu Lys Ile Val Pro Leu Val Leu
    210                 215                 220

tat ttg aca cac gaa agt acg aaa gtg tca aac tcc att ttt gaa ctc   720
Tyr Leu Thr His Glu Ser Thr Lys Val Ser Asn Ser Ile Phe Glu Leu
225                 230                 235                 240

gct gct gga ttc ttt gga cag ctc aga tgg gag agg tct tct gga caa   768
Ala Ala Gly Phe Phe Gly Gln Leu Arg Trp Glu Arg Ser Ser Gly Gln
                245                 250                 255

att ttc aat cca gac ccc aag aca tat act cct gaa gca att tta aat   816
Ile Phe Asn Pro Asp Pro Lys Thr Tyr Thr Pro Glu Ala Ile Leu Asn
            260                 265                 270
```

Patent Laws
visualizing innovation

http://www.patentlaws.net/


```
aag tgg aag gaa atc aca gac tat agg gac aag cca ttt aac aaa act   864
Lys Trp Lys Glu Ile Thr Asp Tyr Arg Asp Lys Pro Phe Asn Lys Thr
        275                 280                 285

cag cat cca tat caa ctc tcg gat tat aat gat tta atc acc aaa gca   912
Gln His Pro Tyr Gln Leu Ser Asp Tyr Asn Asp Leu Ile Thr Lys Ala
    290                 295                 300

aaa aaa tta cct ccc aat gaa caa ggc tca gtg aaa atc aag tcg ctt   960
Lys Lys Leu Pro Pro Asn Glu Gln Gly Ser Val Lys Ile Lys Ser Leu
305                 310                 315                 320

tgc aac aaa gtc gta gta gtt acg ggt gca gga ggc ggt ctt ggg aag  1008
Cys Asn Lys Val Val Val Val Thr Gly Ala Gly Gly Gly Leu Gly Lys
                325                 330                 335

tct cat gca atc tgg ttt gca cgg tac ggt gcg aag gta gtt gta aat  1056
Ser His Ala Ile Trp Phe Ala Arg Tyr Gly Ala Lys Val Val Val Asn
            340                 345                 350

gac atc aag gat cct ttt tca gtt gtt gaa gaa ata aat aaa cta tat  1104
Asp Ile Lys Asp Pro Phe Ser Val Val Glu Glu Ile Asn Lys Leu Tyr
        355                 360                 365

ggt gaa ggc aca gcc att cca gat tcc cat gat gtg gtc acc gaa gct  1152
Gly Glu Gly Thr Ala Ile Pro Asp Ser His Asp Val Val Thr Glu Ala
    370                 375                 380

cct ctc att atc caa act gca ata agt aag ttt cag aga gta gac atc  1200
Pro Leu Ile Ile Gln Thr Ala Ile Ser Lys Phe Gln Arg Val Asp Ile
385                 390                 395                 400

ttg gtc aat aac gct ggt att ttg cgt gac aaa tct ttt tta aaa atg  1248
Leu Val Asn Asn Ala Gly Ile Leu Arg Asp Lys Ser Phe Leu Lys Met
                405                 410                 415

aaa gat gag gaa tgg ttt gct gtc atg aaa gtc cac ctt ttt tcc aca  1296
Lys Asp Glu Glu Trp Phe Ala Val Leu Lys Val His Leu Phe Ser Thr
            420                 425                 430

ttt tca ttg tca aaa gca gta tgg cca ata ttt acc aaa caa aag tct  1344
Phe Ser Leu Ser Lys Ala Val Trp Pro Ile Phe Thr Lys Gln Lys Ser
        435                 440                 445

gga ttt att atc aat act act tct acc tca gga att tat ggt aat ttt  1392
Gly Phe Ile Ile Asn Thr Thr Ser Thr Ser Gly Ile Tyr Gly Asn Phe
    450                 455                 460

gga cag gcc aat tat gcc gct gca aaa gcc gcc att tta gga ttc agt  1440
Gly Gln Ala Asn Tyr Ala Ala Ala Lys Ala Ala Ile Leu Gly Phe Ser
465                 470                 475                 480

aaa act att gca ctg gaa ggt gcc aag aga gga att att gtt aat gtt  1488
Lys Thr Ile Ala Leu Glu Gly Ala Lys Arg Gly Ile Ile Val Asn Val
                485                 490                 495

atc gct cct cat gca gaa acg gct atg aca aag act ata ttc tcg gag  1536
Ile Ala Pro His Ala Glu Thr Ala Met Thr Lys Thr Ile Phe Ser Glu
            500                 505                 510
```

Patent Law
http://www.patentlaw.com


```
aag gaa tta tca aac cac ttt gat gca tct caa gtc tcc cca ctt grt   1584
Lys Glu Leu Ser Asn His Phe Asp Ala Ser Gln Val Ser Pro Leu Val
        515                 520                 525

grt ttg ttg gca tct gaa gaa cta caa aag tat tct gga aga agg gtt   1632
Val Leu Leu Ala Ser Glu Glu Leu Gln Lys Tyr Ser Gly Arg Arg Val
    530                 535                 540

att ggc caa tta ttc gaa gtt ggc ggt ggt tgg tgt ggg caa acc aga   1680
Ile Gly Gln Leu Phe Glu Val Gly Gly Gly Trp Cys Gly Gln Thr Arg
545                 550                 555                 560

tgg caa aga agt tcc ggt tat grt tct att aaa gag act att gaa ccg   1728
Trp Gln Arg Ser Ser Gly Tyr Val Ser Ile Lys Glu Thr Ile Glu Pro
                565                 570                 575

gaa gaa att aaa gaa aat tgg aac cac atc act gat ttc agt cgc aac   1776
Glu Glu Ile Lys Glu Asn Trp Asn His Ile Thr Asp Phe Ser Arg Asn
            580                 585                 590

act atc aac ccg agc tcc aca gag gag tct tct atg gca acc ttg caa   1824
Thr Ile Asn Pro Ser Ser Thr Glu Glu Ser Ser Met Ala Thr Leu Gln
        595                 600                 605

gcc grg caa aaa gcg cac tct tca aag gag ttg gat gat gga tta ttc   1872
Ala Val Gln Lys Ala His Ser Ser Lys Glu Leu Asp Asp Gly Leu Phe
    610                 615                 620

aag tac act acc aag                                              1887
Lys Tyr Thr Thr Lys
625
```

<210> 7
<211> 629
<212> PRT
<213> Saccharomyces cerevisiae
<223> Nucleotides 1-1887 of SEQ ID NO: 6 corresponds
to nucleotides 241- 2127 of SEQ ID NO: 3.

<400> 7

```
Met Pro Gly Asn Leu Ser Phe Lys Asp Arg Val Val Val Ile Thr Gly
  1               5                  10                  15

Ala Gly Gly Gly Leu Gly Lys Val Tyr Ala Leu Ala Tyr Ala Ser Arg
             20                  25                  30

Gly Ala Lys Val Val Val Asn Asp Leu Gly Gly Thr Leu Gly Gly Ser
         35                  40                  45

Gly His Asn Ser Lys Ala Ala Asp Leu Val Val Asp Glu Ile Lys Lys
     50                  55                  60

Ala Gly Gly Ile Ala Val Ala Asn Tyr Asp Ser Val Asn Glu Asn Gly
 65                  70                  75                  80

Glu Lys Ile Ile Glu Thr Ala Ile Lys Glu Phe Gly Arg Val Asp Val
                 85                  90                  95

Leu Ile Asn Asn Ala Gly Ile Leu Arg Asp Val Ser Phe Ala Lys Met
```

Patent Lens


```
                100                 105                 110

Thr Glu Arg Glu Phe Ala Ser Val Val Asp Val His Leu Thr Gly Gly
        115                 120                 125

Tyr Lys Leu Ser Arg Ala Ala Trp Pro Tyr Met Arg Ser Gln Lys Phe
    130                 135                 140

Gly Arg Ile Ile Asn Thr Ala Ser Pro Ala Gly Leu Phe Gly Asn Phe
145                 150                 155                 160

Gly Gln Ala Asn Tyr Ser Ala Ala Lys Met Gly Leu Val Gly Leu Ala
                165                 170                 175

Glu Thr Leu Ala Lys Glu Gly Ala Lys Tyr Asn Ile Asn Val Asn Ser
            180                 185                 190

Ile Ala Pro Leu Ala Arg Ser Arg Met Thr Glu Asn Val Leu Pro Pro
        195                 200                 205

His Ile Leu Lys Gln Leu Gly Pro Glu Lys Ile Val Pro Leu Val Leu
    210                 215                 220

Tyr Leu Thr His Glu Ser Thr Lys Val Ser Asn Ser Ile Phe Glu Leu
225                 230                 235                 240

Ala Ala Gly Phe Phe Gly Gln Leu Arg Trp Glu Arg Ser Ser Gly Gln
                245                 250                 255

Ile Phe Asn Pro Asp Pro Lys Thr Tyr Thr Pro Glu Ala Ile Leu Asn
            260                 265                 270

Lys Trp Lys Glu Ile Thr Asp Tyr Arg Asp Lys Pro Phe Asn Lys Thr
        275                 280                 285

Gln His Pro Tyr Gln Leu Ser Asp Tyr Asn Asp Leu Ile Thr Lys Ala
    290                 295                 300

Lys Lys Leu Pro Pro Asn Glu Gln Gly Ser Val Lys Ile Lys Ser Leu
305                 310                 315                 320

Cys Asn Lys Val Val Val Val Thr Gly Ala Gly Gly Gly Leu Gly Lys
                325                 330                 335

Ser His Ala Ile Trp Phe Ala Arg Tyr Gly Ala Lys Val Val Val Asn
            340                 345                 350

Asp Ile Lys Asp Pro Phe Ser Val Val Glu Glu Ile Asn Lys Leu Tyr
        355                 360                 365

Gly Glu Gly Thr Ala Ile Pro Asp Ser His Asp Val Val Thr Glu Ala
    370                 375                 380

Pro Leu Ile Ile Gln Thr Ala Ile Ser Lys Phe Gln Arg Val Asp Ile
385                 390                 395                 400

Leu Val Asn Asn Ala Gly Ile Leu Arg Asp Lys Ser Phe Leu Lys Met
                405                 410                 415

Lys Asp Glu Glu Trp Phe Ala Val Leu Lys Val His Leu Phe Ser Thr
```

Patent Law


```
            420                 425                 430

Phe Ser Leu Ser Lys Ala Val Trp Pro Ile Phe Thr Lys Gln Lys Ser
        435                 440                 445

Gly Phe Ile Ile Asn Thr Thr Ser Thr Ser Gly Ile Tyr Gly Asn Phe
    450                 455                 460

Gly Gln Ala Asn Tyr Ala Ala Ala Lys Ala Ala Ile Leu Gly Phe Ser
465                 470                 475                 480

Lys Thr Ile Ala Leu Glu Gly Ala Lys Arg Gly Ile Ile Val Asn Val
                485                 490                 495

Ile Ala Pro His Ala Glu Thr Ala Met Thr Lys Thr Ile Phe Ser Glu
            500                 505                 510

Lys Glu Leu Ser Asn His Phe Asp Ala Ser Gln Val Ser Pro Leu Val
        515                 520                 525

Val Leu Leu Ala Ser Glu Glu Leu Gln Lys Tyr Ser Gly Arg Arg Val
    530                 535                 540

Ile Gly Gln Leu Phe Glu Val Gly Gly Gly Trp Cys Gly Gln Thr Arg
545                 550                 555                 560

Trp Gln Arg Ser Ser Gly Tyr Val Ser Ile Lys Glu Thr Ile Glu Pro
                565                 570                 575

Glu Glu Ile Lys Glu Asn Trp Asn His Ile Thr Asp Phe Ser Arg Asn
            580                 585                 590

Thr Ile Asn Pro Ser Ser Thr Glu Glu Ser Ser Met Ala Thr Leu Gln
        595                 600                 605

Ala Val Gln Lys Ala His Ser Ser Lys Glu Leu Asp Asp Gly Leu Phe
    610                 615                 620

Lys Tyr Thr Thr Lys
625
```

<210> 8
<211> 6455
<212> DNA
<213> Pseudomonas oleovorans

<400> 8

```
gaattcctgc gcgtgcactc ccccteggcc gaggtccagg gccacggtaa ccccatcctg 60
cagttcggca agatcaacgt cggcctcagc ggcctggaac ctgccgggca atacgcactg 120
aaactgaccc tcgacgacgg ccatgacagc ggcctgttca cctgggaata cctcgagcag 180
ctgtgcctgc gccaggaaca gctgtgggcc gagtacctcg acgaactgca caaggcnggg 240
aaatcccgcg accctgccga gtcggtggtc aaactcatgc tctagcgcaa ggcctgcagg 300
atttagagcg cattttctaa aatcatctgt ttgaatgact tacagacagc ccagtgacgg 360
gctgtcttgc gcattacatg adagtcgggt aaccaatggg ggtggcaagt tccctgcatc 420
aaattgcagg tagtcagaac cctcgcagca ccgctgtttcc ttatcactgg tcacccgagt 480
agcagtaccg ggctcagaac tgtgcaccag ccacagcaac cggtactcgt ctcaggacaa 540
cggagcgtcg tagatgagta acaagaacaa cgatgagctg cagcggcagg cctcgaaaaa 600
caccctgggg ctgaaacccg tcatcggtat ccgcgcaaa gacctgttga gctcggcacg 660
```

Patent Law
eLaw Exp INFORMATION

http://www.patentlaw.com/

cacccgtgctg cgccaggccg tgcgccaacc gctgccacagc gccaagcatg tggcccactt 720
tggcctggag ctgaagaacg tgctgctggg caagtccagc cttgcccccg aaagcgacga 780
ccgtcgcttc aatgaccccg catggagcaa caaccaactt taccgccgct acctgcaaac 840
ctatctggcc tggcgcaagg agctgcagga ctggatcggc aacagcgacc tgtcgccncca 900
ggacatcagc cgcggccagt tcgtcatcaa ccgtgatgcc gaagccatgg ctccgaccaa 960
caccctgtcc aacccggcag cagtcaaacg cttcttcgaa accggcggca agagcrctgct 1020
cgatgycctg tccaacctgg ccaagjacct ggtcgacaac ggtggcatgc ccgacgaggt 1080
gaacatggac gccttcgagg tgggccaqaa cctgggcacc agtcaaggcg ccgtggtgta 1140
ccgcaacgat gtgctggagc tgatccagta caaggccatc accgagcagg tgcatgccng 1200
ccgcgtgctg gtggtgccgc cgcagatcaa caagttctac gtattcgacc tgagccccgga 1260
aaagagcctg gcacgctact gcctgcgctc gcagcagcag accttcatca tcagctggcg 1320
caaccccgacc aaagcccagc gcgaatgggg cctgtccacc tacatcgacg cgctcaagga 1380
ggcggtcgac gcggtgctgg cgattaccgg cgacaaggac gtgaacatgc tcggtgcctg 1440
ctccggcggc atcaccrgca cggcattggt cggccactat gccgccctcg gcgaaaacaa 1500
ggtcaatgcc ctgaccctgc tggtcagcgt gctcgacacc accatggaca accaggtcgc 1560
cntgttcgtc gacgagcaga ctttcggagc cgccaagcgc cactcctacc aggccggtgt 1620
gctcgaaggc agccgagatg ccaaggtgtt cgcctggatg cgccccaacg acctgatctg 1680
gaactactgg gtcaacaact acctgctcgg caacgagccg ccggtgttcg acatcctgtt 1740
ctggaacaac gacaccaagc gcctgccggc cgccttccac ggcgcactga tcgaaattgt 1800
caagagcaac ccgctgaccc gcccggacgc cctggaggtt tgcggcactc cgatcgaccc 1860
gaaacaggtc aaatgcgaca tctacagcct tgccggcacc aacgacaaca tcaccccgtg 1920
gnagtcatgc taccgctggg cgcacctgtt cggcggcaag atcgagttcg tgctgtccaa 1980
cagcggccac atncagagca tcgtcaacgc gccaggcaac gccaaggggc gcttcatgac 2040
cggtgccgat cgcccgggtg acccggtggc ctggcaggaa aacgccaacg agcatgccga 2100
crcctggtag ctgcactggc aaagctggct gggcggcagt gccggccgag ctggaaaagc 2160
gccgancagc ctgggcaacc gtgcctatgc cgctggccag gcatccccgg gcacctacgt 2220
tcacgagcgt tgagctgcag cgccgtgcgc accgcaccgc gccggtgcgg ttcatttcac 2280
cccatgagtc acgcgcatgc cgccaaccta catcttcagg accgtcgagc tggacaacca 2340
ctcatccgc accgccgtcc gccgggcaaa accgcaccta gcgccgtcgc tgatcttcaa 2400
cggcatcggt gccaacctgg agctggtgtt tccgttcatc gaggcactgg accggacct 2460
ggaagtcatt gccttgaccg taccccgggt cggcggctcg tccacgccgc gccaccctta 2520
ccgcttcccc gggtcggcca agctgacggc acgcatgccg gactacctcg actcggcca 2580
ggtcaatgtc atcggtgtgt ctgggcggcg cgccctggcc cagcagttcg ccccagatta 2640
ccccgaacgc tgcaagaaac tggtgctggc cgccaccgca gccggtgcgg tgatggtgcc 2700
aggcaagccc aaggtgttgt ggatgatggc cagcccacgg cgttacgtgc agccgtcgca 2760
tgtcatccgc atgcgccgca cgatctatgg cggcggcttc cggcgtgacc ccgaactggc 2820
catgcagcac gcntccaagg tgccgctccgg cggcaagatg ggctactact ggcagcntgt 2880
cgccgggcctc ggctggacca gcatccactg gctgccacaag atccagcaac cgaccctggt 2940
gctggccgcc gacgacgacc cgctgatccc gctgatcaac atgccgcctgc tggcctggcg 3000
gattcccaat gccgagctac gcattatcga ggacggtcat ttgttcctga tcaccccggc 3060
cgaggccgtc gcccgatcca tcatgaagtt ccttcagcaa gaacgacagc gcgccgtcat 3120
gcacccctgc ccggcttcgg gcgggtaaat cgatgcggcc ttcttcgcgg gcgcgccgc 3180
tcccacaggg atggcgccga acctgtggga gcgggcatgc ccgcgaaggt ctcgacagcg 3240
aaatggctta gacgagggag tgttgccatg aaagacaaac cggccaaagg agccgcaacg 3300
cttccgccca ccagcatgaa cgtgcagaac gccatcctcg gcctgcgcgg tcgtgacctg 3360
atttccacgc tgcgcaatgt cagccccaa agcctgcgtc accgcgtcga cacgcacat 3420
cacctgttgg ccctgggtgg ccagctgggc cgggtgatac tgggtgacac accgcttcag 3480
ccgaaccccg gcgatccgcg cttcagcgac ccgacatgga gccagaaccc gatgagcgaa 3540
cgcggcctgc aagcctacct ggcctggcag aagcagaccc gcctgtggat cgaggaaagc 3600
cacctggacg acgatgaccg ggccccgtgc gacttcctgt tcaacctgat caacgatgcc 3660
ctggcgccaa gcaactcgat gctcaacccg cfggcggtca aggaacgtt caacagcggt 3720
ggccagagcc tggtgcgcgg cgtggccaac ctgatcgcca caatgacggc 3780
ctgccacgcc aggtccacga gcacgccttc gaagtgggcg gcaacctggc cgcgactgcc 3840
ggcgcgtgg tgttccgaca cgagctgctg gaactgatcc agtacaagcc gatgagcgaa 3900
aagcagcacg cccggccact gctggtggtg ccgccaacaga tcaacaagtt ctccatcttc 3960
gacctcagct cgaccaacag cttcgtccag tacatgctca agaatggtct gcagytcgtc 4020
atggtcagct ggcgcaaccc cgaccgcgc caccgcgaat gggcctgtc cagctacgtg 4080
caggcctgg aagaagcgct caacgcttgc cgcatgcatg gcggcaaccg cgaccccaac 4140
ctgatgggcg cctgcgccgg cggccgacc atggccgcac tgcaggggca ccfgcagggc 4200
aagccaccagc tgcgccgggt gcgcagcgcc acctacctgg tcagcrrgct ggacgagcaag 4260

Patent Law
machine translation

http://www.patentlaw.com


```
ttcgaaagcc ccgccagcct gttcgccgac gagcagaccc tcgaggccgc caagcgccgc 4320
tcctaccagc gcggtgtgct ggatggcgcc gaggtggcgc ggatcttcgc ctggatgcgg 4380
cccaacgacc tgatctggaa ctactgggtc aacaactacc tgctcggcaa gacaccacca 4440
gccttcgaca tcctgtactg gaacgccgac agcacgcgcc tgccccgccg gctgcatggc 4500
gacctgctgg acttcttcaa gctcaacccg cagccgcgct cgcagctgtt ggagctatgc 4560
ggcacaccca tcgacctgca gaaggtcgag ctggacagtt tcaccgtggc cggcagcaac 4620
gaccacatca ccccgtggga tgcggtgtac cgctcggcct tgcgctgtgg tggcgaccgg 4680
cgcttcgtgc tggccaacag cgggcacatc cagagcatca tcaacccgcc cggcaacccc 4740
aaggcctact accgggccaa ccccaagctg tccacgcagc cgccgtgcctv gctcccagat 4800
gccaagcgca gcgaaggcag ctggtggccg ttgtggctgg agtggatcac cgcgcgctcc 4860
ggccgcatca aggcaccgcg cagcgaactg ggcaatgcca cctacccacc gctggtgccc 4920
gcgccgggca cctacgtgct gaccgatga gcatgccgac tggatgaaga ctcgcgaccg 4980
tatcctcgaa tgtgccctgc agctgttcaa ccaggcgggc gaaccgaacg tatccacccc 5040
ggaaattgcc aacgcactgg gcatcagccc tggcaacctc tactaccact tccacggcaa 5100
cgagccgttg gtgctggggt tgttcgagcg ctttgaagaa gcgctgatgc ccttgctcga 5160
ccgccgctg gaggtacgcc tggacgccga ggattactgg ctgttcctgc acctgatcgt 5220
cgaacgcatg gcgcagtacc gcttcctgtt ccaggacctg tcgaacctga ccgggcgcct 5280
gccaaactg gccccgggca tgcgcaacct gatcaacgcg ctcaagcgca cactggccgc 5340
gttgctggcc agcctcaagg gccaaggttt ggtagagcag gagcacccagg cgctgggcca 5400
actggtggag cagatcaccc tgacactgat gttctcgctg gattatcagc gggtactggg 5460
gcgcgaggag gatgtgggga ttgtggtgta ccaggtgatg atgctggtgg cgccgcatct 5520
gcaggcccag gcgcgggggg cggcgagaca atrggcggtg cggtatcttg agggggtaagc 5580
ctgttgattc ggtgtcgcgg ctttgcgggt catgcccgct cccacaggtg aaatgcagtg 5640
ctcgagtgca cacagcacct gtgggagcgg gcaagcccgc gaagatggcg acgcggtatc 5700
gtaaccgaag cgccggtgag tttctgatc tgcttggtca ggctgtccac ctgctggtgc 5760
aggcctcga tctggttccg gctcggcacg ccaaggcgcg agatggcact gttcaggcgc 5820
ttgttcgaag cctcttcgag ttcgctccac ttgcctagcg cacggtcctt cacgccgcgc 5880
acacgccaag tggtcgacga cttggcagtt tcagcaacat cttcgtgcgt cttcttcgcc 5940
tgtttctcgg ccttctcgcc atccttttac agccagctcga acagctccgg gccgtcctgg 6000
tcgatcttcg aatagatacc aagccccgcc agccagatct tgcgggagta cttctcgatc 6060
ccgccgccca ggagctgccc tcttctcgg aatta 6095
```

<210> 9
<211> 5054
<212> DNA
<213> Pseudomonas putida

<400> 9

```
ctgcagtcga cctcgccttg ccagtgggcg gcgagcatca gqccccttcc atcgggcagg 60
atgaaaacct gcaaggccgg ctggcggcag tcgatctcga tgaccttgcc ctccagccgc 120
gcgacccgcg gcagggccgt gctgtccatc cgcaggacgc ggttcaggcc atgttcggcg 180
ctggcgagca gcccgccag caqcatcagg gcttgatccc ccgatgcagg gcaacgatgc 240
cgctggtcat gttgtggtag gtgaccccgt cgaaaccggc ctcgaccatc atggccttca 300
gggttttcct gtcgggggtgc atgcggatcc actcggcgag gtaaccggtag ctctccgaat 360
cgttggtgat cagcttgccg gccagcggca tgaaggcgaa cgagtaggcg tcgtaggcct 420
tggacatcag cttgttggtc ggcttggaga actccagcac cagcaggcga ccgcctggct 480
tcaqccacgcg cagcatcgag cggatggctt cgtcctttgcg ggtgacgttg cgcaggccga 540
aggcgatggt cacgcagtcg aagtggttgt ccgggaatgg cagcttatcg gcgtccggct 600
gaacgaactc gatgttgccg gccacgccac ggtcgagcag ggtcgtcacga ccgacttga 660
gcatcgattc gttgatgtcg gccagcacta cctgaccgyt cqggccgacc agccgcgaga 720
acttggcggc caggtcgccg gtaccgccgg cgatgtccag tacacgattg ccggccgcta 780
cgccgacag ctcgatggtg aagcgcttcc acaggcggtg catgccgccg gaaaqcacat 840
cgttcatcag gtcgtacttg gccgctaccg agtggaacac ctcggcgact ttcttcgcct 900
```

Patent Law
Machine Translation

http://www.patentlaw.com

tctggctttc agggaagtcc tggtaaccga aatgggtggt gggttcggcg tggtcgcctt 960
tgcgctggtc gttcatatcg cttcaccgga aaaaattacc gccattctag ggggaacggg 1020
cagatttgtc ttggcgggat gtgccagtgg gcagggcggt gcataaatgc cattatgtct 1080
tcatcttcag gaacacccgc atgacccaga tcaggcgtcga acgcaaacat tccctcggcc 1140
gcgatgcgcc cggtgccaag gctgaagcgc tggtcgacaa actgacccgc ggaatacgacc 1200
tcaaggccac ctggaacggc gaacaggtcg acgtggccgg cagcggtgcc aacggcagcg 1260
tgcacatctt cgatgaccgc atccgcgtcg aattgaagct gggcatgatg ctgtcgatga 1320
tgagcggcac catcaagggc gagatcgagc gggcgctgga caaagccctg gcctgacccc 1380
ttccggggcc catgctcgtt caccttaggg tgaagattct aattttccgtc tctaccttgt 1440
gctcaagccc aacctccatg ggcgtttat cctccactca tgagcatgag gtacgagaca 1500
tggccaaagt gactgtgaag aaaaaggacg acgctcgtgg gaggtgcgcg 1560
gctacgcgcg caagatctgg ctggcgggca tcgggcgcta tgcgcgtgtg ggccagyaag 1620
gctccgacta cttcaatgag ctggtcaagg ccggcgaagg cgtcgagaag cgtggcaaga 1680
agcgcataga caaggagctc gatgctgccc acaatcagat cgaagaagcg acccaggaag 1740
tcagtgcgct acgcggcaag gtcgaagttc aactggacaa gatcgaaaaa gctttcgacg 1800
cgcgggtagg tcgcgccttg aatcgccttg gcattccgtc taaacatgac gttgaggcgt 1860
tgtccatcaa gcttgaacag ctgcacgagc tgctcgagcg cgtccgcgac aaacctaag 1920
gagatcaagg tggctggcaa gaagaattcc gagaaagaag gcagctcctg ggtcggcggg 1980
atcgagaagt actcccgcaa gatctgcgtg gcgggcttg gtatctattc gaagatcgac 2040
caggacggcc cgaagctgtt cgactcgctg gtgaaggatg gcgagaaggc cgagaagcag 2100
gcgaaggaga cggccgaaga tgttgctgaa actgccaagt cgtgcgaccac ttcgcgtgtg 2160
tcgggcgtga aggaccgtgc gctgggcaag tggagcgaac tcgaagagga ctcgagacaag 2220
cgcctgaaca gcgccatctc gcgccttggc gtgccgagcc gcaacgagat caaggccctg 2280
caccagcagg tggacagcct gaccaagcag atcgagaaac ttaccggcgc ttcgcttacc 2340
ccgatttcgt cgcgcgctgc cgccaaaccg gctgcgagca aggcggcggc caagcactg 2400
gccaagacgg caggcgccaa gcctgcggcg aaaactgccg cggccaagcc cgcggccaag 2460
actgctgcgg cgaaacctgc tgccaagact gcagcggcca agcctgcggc gaaaccggca 2520
gcggccaagc cggctgtggc gaagaagccg gcagtgaaga aagcaccggc caagccagca 2580
gccgccaagc cggcagctcc agcggcgagc gccgctacga ccgctagcgc agctcctgca 2640
ccaaccgcgg ctccggccag csatccgcct tcggcaccga caggcacccg tacccctgatc 2700
tgatacccgcg tcgccrrctt cgcggggctg cccgctccca caggtcctgt gtgcactcga 2760
gcactgcatt tcacctgtgg gagcgggcat gcccgcgaaa gccgcgacac cgaaacaaca 2820
ggcttacccc tccagatacc tcacccccaa ctgctccgcc gccccccgcg cctgggcctg 2880
cagatgcggc gccaccagca tcatcacctg gtacaccaca atcccccacat cccccctgcg 2940
ccccagtacc cgctggtaat ccagcgagaa catcagtgtc agggtgatct gctcccaccag 3000
ttgccccagc gcctgggtct cgctctctac cgccttcgtg cgctcgagcc tggccagcaa 3060
cgccgccagt gtgcgcttga gtgcgttgat caggctgcgc atgccgccgg ccagtttggg 3120
caggggccag gtcaggttcg acaggtcctg gaacgaggaag cggtactgcg ccatgcgttc 3180
gacgatcagg tgcaggaaca gccagtaatc ctcggcatcc aggcgtacct ccagtggcgg 3240
gtcgagcaag ggcattagcg cttcttcaaa gcgcrcgaac agccccagca ccaacggcrc 3300
cttgccgtgg aagtggtagt agaggttgcc ggggctgatg cccagttcgt tggcaatttc 3360
cagggtgcat acgttcggtt cgccctgctg gttgaacagc tgcagggcac attccaggat 3420
acggtcgcga gtcttcatcc agtcggcatg ctcatcgggt cagcacgtag gtgcccggcg 3480
cagggcccag cggtgggtag gtggcattgc ccagttcgct gcgtggtgcc ttgagcgggc 3540
cggagcgtgg tgtgatccac tccagccaca acggccacca gcbgccttcg ctgcgcttgg 3600
cgtcgtggtgt ccaggcacgg gggtcgctgg acagcttggg gttggccagg taastaggcct 3660
tggggttgcc gggcgggttg atgatgctct ggatgtgccc gctgttggcc agcacgaagc 3720
gacggtcgcc gcccagcagc aaggccgagc ggtacaccgc atcccacggg gtgatgtggt 3780
cgttgctgcc ggccacaggtg aaactgtcca gatcgaccct ctgcaggtcg atgggggtgc 3840
cgcatacctc caggccggct gggtgagtca gcgggttgag cttgaagaag tccagcaggt 3900
cgccatgcag cgcggcgggc aggcgcgtgc tgtcggcgtt ccagtacagg atgtcgaaag 3960
ctggtggtgt cttgccgagc aggtagttgt tgaccagta gttccagatc aggtcgttgg 4020
gcgcgatccs ggcgaagatc cgcgccaccc cggcgccctc cagccacgcct ggttggtagg 4080
agcggcgcct ggcggcttcg atggtctgct cgtcgggcgaa cagcctgtgcg gggcrttcga 4140
acttgcrgtc cagaaggctg accaggtagg tggcgctgcg caccngacgc agctggtgct 4200
tggcctgcag gtgccctgt agcgcgtgcca tggtcgtgcc gccggccgag gccccatca 4260
ggttcgggtc gcggttgccg crgatgctgc ggcaagcgtt gagcgcttct tccagggcct 4320
gcacgtagct cgcacaggcc cattcgcggt ggcgcgggtc gggtttgcgc cagctcacca 4380
tgaacacctg caggccattc ttgagcatgt actggacgaa gctgttggtc gagctgaggt 4440
cgaagatgta gaacttgttg atctgtggcg gcactaccag cagtggccgg gcgtgctgct 4500

Patent Law
Machine Translation

http://www.patentlaw.machine.com/


```
tttcgctcat cggcttgtac tggatcagct ccagcagctc gttgcgaaac accacggcgc 4560
cggccggttgc agccaggttg ccgccacctt cgaaggcgcg ctcgtcgacc tggcgtggta 4620
ggccatcgtt gtggcgcagg tcatcgagca ggtgggccac gccgcgtacc aggctctggc 4680
cacccgtgtt gaacagttcc ttgaccgcca gcgggttgag cagcgagttg ctcggcgcca 4740
gtgcatcgtt gatcaggttg aacaggaagt gcgcacgggc ccggtcatcg tcgtccaggt 4800
ggcrttcstc gatccacagg cgggtctgct tctgccaggc caggtaggct tgcaggccgc 4860
gccggtagaa cgggttstgg ctccatgtcg ggtcgctgaa gcgcggatcg cgcgggttcg 4920
gctgaaccgg tgtgtcaccc agcatcaccc tgcccagctg accacccagg gccaacagat 4980
gatgcgcggt gtgcagcggg tgacgcaggc tttggcggct gacattgcgc agcgtggaaa 5040
tcaggtcacg gccg                                                   5054

<210> 10
<211> 7311
<212> DNA
<213> Pseudomonas aeruginosa

<400> 10
ctgcagggcc gcctgccgat ccgcgtggag ctcaaggccc tcagtccgaa cgatttcgag 60
cgcatcctca ccgagccgca tgcctcgctc accgagcagt accgcgagct gctgaagacc 120
gagggggctgg ccatcgagtt cgccgaggac ggcatcaagc gcctttgcga gatcgccgtg 180
caggtcaacg agaagaccga gaacatcggt gcccgccgcc tgcatacgct gctcgagcgg 240
ctgctggaag aggtctcgtt cagcgccgcc gacctggcca gcgagcatag cgacaagccg 300
atcctgatcg atgccggcta cgtcaacagc cacctcaggcg agtggccga ggacgaggac 360
ctgtccgct acatcctttg acaccccgcg ccgccacagc caacbccgtg gcggcgggcc 420
gcgcggtccc gaaccgggat atcctgtac tccgcctcc cgcgagtccg atgcgatgcg 480
tatcccttcc gccatccagc tgcacaaagc ctcgaagacc ctgaccctgc gctacggcga 540
ggatagctac gacctgcctg cgatgttcct ccgcgtgcat tcgccctcgg ccgaggtcca 600
gggccacggc aacccggtat tgcagtacgg caagatgaac gtcggcctgg tcggcgtcga 660
accgccgggc cagtacgcac tgaagctgag cttcgacgac ggccacgaaa gcggccgtgt 720
cacctgggac tacctgtacg agcrggcgac cngcaaggac cagctatggg ccgactacct 780
ggcggagctg gccagccgcg gcaagtcgcg cgaccccgac gagtcggtcg tcaagcrgat 840
gctctgaagc gccggccgca gtgcccctc gcggcacacg gcatccaggc gatttttctc 900
cgctgcccag aacgagggca cytcatttgc aacattcgcc ccgcagactg ccagaccaga 960
catcccgtcg gcgccggtgc cacggcgaat gtcctacctt gcaccggcagc aacgctctag 1020
tccgcagtgc ggccgctcgc cgggccagcc accgcggcca ccgatgcttc tgccagcttg 1080
cacgccagcg gaaactcgcg taaccaagac ggtgcagccc cttgtccggg ttccctccc 1140
tgacgtgcgt ccgcccgcc ctgaaacgtg cgggtgggct ggtagtcgag caggtagccg 1200
ccggacacct agtcccccgt ttcgttgcgg tcccctgttt cgcctcgaac aatggagcgt 1260
tgccgatgag tcagaagaac aatcacgagc ttccaacgag agccgcggaa aacacgctga 1320
cctgaatcc ggtgatcggc atccgcggcc aggacctgct cacctccgcg cgcatggtcc 1380
tgctccaggc ggtgcgccag ccgctgcaca gcgccaggca cgtggccgct cgtggcctgg 1440
agctgaagaa cgtcctgctc ggccagtcgg agctacgccc aggcgatgac gaccgacgct 1500
tttccgatcc ggcctggagc cagaatccac tgtacaagcg ggtgcacgaa gcctacctgg 1560
cctggcgcaa ggagctgcac agctggatca gccacagcga cctgtcgccg caggacatca 1620
gtcgtggcca gttcgtcatc aaccgcgtga cgcaggcgat gtcgccgacc aacagcctga 1680
gcaaccccgc ggcggtcaag cgcttcttcg agaccggcgg caagagcctg ctggacggcc 1740
tcggccacct ggccaaggac ctggtgaaca acggccggat gccgagccag gtggacatgg 1800
acgccttcga ggtgggcaag aacctggcca ccaccgaggg cgccgtgtgg tttccgcaacg 1860
acgtgctgga actgatccag taccgcgcga tcaccgagtc ggtgcacgaa cgccccgtgc 1920
tggtggtgcc gccgcagatc aacaagttct acgtcttcga cctgtcgccg gacaagcgcc 1980
tggcgcgctt ctgccgcgcc aacggcgtgc agaccttcat cgtcagttgg cgcaacccga 2040
ccaagtcgca gcgcgaatgg ggcctgacca cctatatcga ggcgctcgag gaggccatcg 2100
aggtagtcct gtcgatcacc ggcagcaagg acctcaacct ccgcggcgcc tgctccggcg 2160
ggatcaccac cgcgaccctg gtcggcgact acgtcggccag cggcgagaag aaggtcaacg 2220
ccttcacgca actggtcagc gtgctcgact tcgacctgga tacccaggtc gcgctgttcg 2280
ccgacgagaa gactctggag gccgccaagc gtcgttccta ccagtccggc gtgccggagg 2340
gcaaggacat ggccaaggtg ttcgcctgga tgcgcccccaa cgacctgatc tggaactact 2400
gggtcaacaa ctacctgctc ggcaaccagc cgccggcgtt cgacatcctc tactggaaca 2460
acgacaccac gcgcctgccc gccgcgctgc acggcgagtt cgtcgaactg ttcaagcgca 2520
```

Patent Law
sharing innovation

http://www.patentlaw.com

acccgctgaa ccgcccccggc gccctggagg tctccggcac gcccatcgac ctgaagcagg 2580
tgacttgcga cttctactgt gtccgccgtc tgaacgacca catcacccca tgggagtcgt 2640
gctacaagtc ggccaggctg ctggatggca agtgcgagtt catcctctcc aacagcggtc 2700
acatccagag catcctcaac ccacccggca acccccaggc acgcttcatg accaatccgg 2760
aactgcccgc cgagcccaag gcctggctgg aacaggccgg caagcacgcc gactcgtggt 2820
ggttgcactg gcagcaatgg ctggccgaac gctccggcaa gacccgcaag gcgccccgca 2880
gccttggcaa caagacctat ncggccggcg aagccggccc cggaacttac gtgcatgaac 2940
gatgaaaagc gaccagcctg aagaacagcc gcaggagcga tccgcggcct ccgccgagca 3000
aacccccgca gcgcctccgg cgcggccccg tgccgcgcgg aagccccgca ggccccgtat 3060
cgccgagccc gcggctgcgc cgccgaggac cccgagcatg ccccagccct tcgtcttccg 3120
gacccatcgc ctcgacggcc agaccatccg cacccgcagtg cggccgggca agaaggaag 3180
cactccgctg ctgatcttca acggcatagg cgccaagntg gaacttggtg tcccctttgt 3240
ccaggcgctc gaccccgaac tggaggtgat cgccttcgac gttcccgggc tggtcgttcc 3300
ctcgacgccc agcgtgccct accgtttccc cggcctggcc aagcctggccg ngcggatgct 3360
cgactacctg gactacggcc aggtcaacgc gatccggcgtg tcctgggggc gcgcgctggc 3420
ccagcagttc gcccacgact atccggaacg ctgcaagaag ctgatcctcg ccgccacttg 3480
ggctggcgcg gtgatggtgc cgggcaagcc gaaggtactg atgccgcatgg ccagccngcg 3540
gcgctacatc cagccctcct atggcgtaca catcgcccgg gacatctacg gcgggggctt 3600
cgcccgcgac ccaaagctgg ccatggcgca tgccagcaag gtgcgttcgt cgggcaagct 3660
gggctactac tggcaactgt tcgccgggct cggctggagc agcatccacn ggctgcatag 3720
gatccgccag ccgacccttg tgctggccgg cgacgacgac ccgatcatcc cgctgatcaa 3780
catgcgtgtg ctggcctggc gcatttccaa cgccgaactg cacgtgatcg acgacgggca 3840
cctgttcctg gtgaccgcg cngatctggt ggcgccgatc atcatgaagt tcctcgccga 3900
ggagcgccgt cgccgccgtca tgcancctng tccgtcctg ccnaagaccg gatgaactgc 3960
tgcacgggca acaccagggc agcagacact ggttcgtcat ggtgcaggtg catagtcaat 4020
gttccgcaac ggcgcatggc gcctggcttc gccgccagcg ccgcaggcct gccagccccc 4080
tccggcgctt gtggtacagc gcttgctgcc ccactgtcgg gcggcaacct cccttgttac 4140
gcagtgtgtc gtttcgccc cgggtgaaac ggaattcaca ggctataact gcgtatttcg 4200
agccagggga cgatcgcccg tggcatccag actgtggtcc tacgacggag tgtggtccat 4260
gcgagaaaag caggaatcgg gtagcgtgcc gcgccagtac gcaaagcccc tgctgatcgt 4320
cgccatcgtc ggcntgcgcg gcaaggacct gctgacgacg gtccgcagcc tggctgtcca 4380
cggcctgcgc cagccgctgc acagtgcgcg gcacctggtc gccttcggag gcagttggg 4440
caaggtgctg ctgggcgaca cnctgcacca gncgaacccn caggacgccc gcttccagga 4500
tccatnctgg cgcctcaatc ccttctacng gcgcaccctg caggcctacc tggcgtggca 4560
gaaacaactg ctcgcctgga tcgacgaaag caacctggac tgcgacgatc gcgccccgcc 4620
ccgcttcctc gtcgccttgc tctccgacgc cgtgcgcacc agcaacagcc tgatcaatcc 4680
actggcgtta aaggaactgt tcaatacccg cgggatcagc ctgctcaatg gcgtccgcca 4740
cctgctcgaa gacctggtgc acaacggcgg catgcccagc caggtgaaca agaccgcntt 4800
cgagatcggt cgcaacctcg ccaccangca aggcgcggtg gtgttccgca acgaggtgct 4860
ggagctgatc cagtacaagc cgctgggcga gcgccagtac gccaagcccc tgctgatcgt 4920
gcccccgcag atcaacaagt actacatctt cgacctgtcg ccggaaaaga gcttccgtcca 4980
gtacgcccty aagaacaacc tgcaggtctt cgtcatcagt tggcgcaacc ccgacgccca 5040
gcaccgcgaa tgggggcctga gcacctatgt cgaggcctc gaccaggcca tcgaggtcag 5100
ccgcgagatc accggcagcc gcagcgtgaa gctggcggc gcctggcgcg gcgggctcac 5160
cgtagccgcc ttgctcggcc acctgcaggt gcgccggcaa ctgccgcaag tcagtagcgt 5220
cacctacctg gtcagcctgc tcgacagcca ggatgaaagc ccggcgatgc tcttcgcgga 5280
cgagcagacc ctggagagca gcaagcgccg atcctaccag catggcgtgc tggacgggcg 5340
cgacatggcc aaggtgttcg cctggatgcg ccccaacgac cttcatcgga acgacaagct 5400
caacaactac ctgctcggca ggcagccgcc ggcgttcgac atcctctact ggaacaagcg 5460
caacaacgcg ctgccccgcg cgttccacgg cgaactgctc gacctgttca agcacaaccc 5520
gctgacccgc ccgggcgcgc tggaagtcag cggcaccgcg gtggacctgg gcaagggtga 5580
gatcgacagc ttccaggtcg ccggcatcac cgaccacatc acgccctggg acgcgctgta 5640
tcgctcggcc ctcctgctgg gcggccagcg ccgcttcatc ctgtccaaca gcgggcacat 5700
ccgagacatc ctcaaccctc ccggaaaccc caaggcctgc tacttcgaga acgacaagct 5760
gagcagcgat ccaacggcct ggtactacga cgccaagcgc gaagagggca gctgggtcgcc 5820
gytctggctg ggctggctgc aggagccgct gggcgagctg gccaacccrg acttcaaccct 5880
tggcagcgac gcgcatccgc ccctgaagc ggccccgggc acctacgtgc atatacgctg 5940
aaagatccgg ccccggcgcc tggagccggg cacctccatc cccgaagaga gtccggatga 6000
agacacgcga ccgaatcctc gaatgctcgc tgttgctgtt caacgaacag ggcgagccca 6060
acgtctcgac actggagatc gccaacgaac tgggcatcag ccccggcaat ctctactacc 6120

Patent Law
WIPO Annex 1000 (form 0.pdf)


```
acttccatgg caaggaaccg ctggtgatgg cgctgttcga gcggttccag gccgagttgg 6180
cgccgctgct cgatccgccc gaggaggtgc gcctgggcgc ggaggactac tggctgttcc 6240
tgcacctgat cgtcgagcgc ctcgccccact accgcttcct gttccaggac ctgtccaacc 6300
tgaccgggcg cctgccacgg ctggctcgcg gcatccgtac ctggctcggc gcgctgaagc 6360
ggacccatgc caccctgctg gcccgcctca agccgcaccg gcagttcgcc agccagccgc 6420
cggcacctcg gcaactggtc gaagagatca ccctgaccct gctgttctcc cgggattacc 6480
agcggtacct gggcagccaag ggcgaggtgc gcacggtggt ctaccagatc atgatgctgg 6540
tcgcccccga tctgcgcagc gaggcccaac gctcggcgga aagccatggcg cagcgctacc 6600
tgggacccgg atgaaaaacg cccagcgaqt gcccggccgtg tgcctttgcg ccgagtcca 6660
gccctggctg ctcggcgtcg ccggagcgtt cgctgccgga gcgctggcag ccggtgtggc 6720
gcgcggggca gcgggcgcgc tcgaagacgc ggcgggagcg gccggtttcg ccgcggcggg 6780
cttggctgcc ggcttcttcg ccgcaggctt tttgcgagcc ggcttggcgg caggtttcgc 6840
cgcgaggctg gcggcggtcg cagcggccgg cttggctgcg caggcttgcc tgccgctcca 6900
tgcggcaggt ttcgcagcag gcttcgccgc ggccttggct gccggcttgg tggccggttt 6960
cgctgcggcc ttcgcagtcg gtttggccgc gggccttggt gccggcttgg cggccgcggt 7020
tttgccgcgg gtttttttcg ccgcgggttt cgccgcaggc ttggccggcg ccttggctgc 7080
cggttcagct gccggcttgg ccgctgcggt tgccttggcag cggcttgcga cggtttcgc 7140
ctgcaggctg gccgctgcct tgccgccgcg cttgacgctg acgccggtga gtttctcgat 7200
ctgcttggtc agcgtatcga ccttgctgtg cagctcctcc accttgtttgc gccgctcggc 7260
gccgagacgc gagatggcgc tgttcaggcg cttgtcgaaa gcttcctcga g 7311
```

<210> 11
<211> 5051
<212> DNA
<213> Aeromonas caviae

<400> 11

```
gatatccatc agccccctgac agagagcact gatatgaccg gcaggcatcg ccatcccctg 60
ccatccccgc gcgtactggg tgtgatttgga aaactgcacc gtattgacgg gccagacctc 120
catgccgaga cggccgatgg ggagagacgc ggcgctgttg ccggcacagc cqaaaaccac 180
gtgggtactg atagagagaa tgcgttttcat cgaccaccacc actgaagaag catgaggaaa 240
gcgggccaata tatcggatgc atagccggct ctgccagcga ttcccggcaa ccctgccat 300
ttatgcggca aaaagcccat tcaatggagt gttacaccaa cttcccccca cgcctgtcca 360
accctgcaag ccaagagcgc ctcggccccg tcggtgtgat atgggtctctt cacactcttg 420
tttgatggca tatgagggca ttttaatac aagggtggcg atggcgggag aaagcgtcga 480
ggaagagcaa tgaggccgcg cggcaggcaa gccggggccg acgcccccgg ctttgtactt 540
aaggcttaag ggctgacgaa gtgatagacc cagcctbcgt ccgaggtgga atcggaggcc 600
gcagagacaa gtgccggcag gyaggcgacg gcccctccgg cggcgtattg cagcgccatc 660
agggcgcaga gggcggcgtc gtaacgatcc gtccggccca ccacatcaqg tggcaaqgag 720
gcggctatct ccgcctggc cygtgaggcc ttgcctgctg ccttggcaaa gagccgggat 780
agacctccag cacggcgcga tcggcgtggg gctgatgcct cggcgacaag ctgcagatcc 840
ccgaggcgcg gcaagatgga gagcgccagg gtggcgttgt tgcctagcct gtcgaaggtg 900
gccgcacgcg gcttcttgcc gtattgctgc tgcagccagc gctcgcagtc ccgataggca 960
taggggttgt ctatctcccg ctgggccacg gcgcactcga ctccctcccc cgccagcaga 1020
tcgccgaggg ctcgggaaa ggccacgggg gcatcgatgc cgagggccag tggcggccag 1080
gccagcacct gcatcagcgc catctcgtct tgcagcgccg ggcgcagcaa ggcgtccaga 1140
tccggccgca ccccgggagct ccaccgaaac agggggagca ccccgagcca gtgcaactgc 1200
tgcgtgcggg cctgccagcc caccacggcc accgcctggg catttgcccg ccagcccctt 1260
acatcccaac cgatgccgat ggcatccaag tgttccgttg tcatgcccct gtcacctctg 1320
cgcattattg atggagcaca gggtaatggc tgccgcccctc aaagcaaggc tggcggcacc 1380
gcttagaaag atttcttgaa gttgatcagc ggcaagatgg ggaagatgcc gttctctgcg 1440
tagttggcga gccctatctg caggcaatcg aggtgcttgg tggcattgat gaagccaagc 1500
tggaaggtgg tgccctcggc atagttgacg aagccgaggt tggccaggcc attgcccttg 1560
gcgatgttga ccgcccccca gttcagccac tgcacgttgt tggtcaggtt gacgaaaccc 1620
aggttgaccc cggtgtcctg cccctcatgc cagtiyacgg cgttgatggc gacccccgcg 1680
aactgatggc gcaccgggc ggcgccgaag aagatgccaa gctgcaggcc ggtgaactga 1740
tccacgtccg agagggcgaa caccggcaga tctatgacct tcaacatgacc ggtgcggccca 1800
tacaggaagg aggcgcgcgc cccttccacc tggtgggagg aaggcaggtt gatgccgggc 1860
aggtagatct ggaccggggt gctggcctgg gccacgccgg cgagggccag cgcggagcaa 1920
```

Patent Law
visibility improvement

http://www.patentlaw.com/


```
cagagcagca gggcgagagg tttcatcggg attccttggc agtctgaatg acgtgccagc 1980
ctatcagcgc ggcgccggtg cggccgaggc gcgccggacc cagtgcgtca cctctcgtct 2040
gatccgcctc cctcgacggg cgtcgctgac aaaaaaattc aaacagaaat taacatttat 2100
grcatttaca ccaaaccgca tttggttgca gaatgctcaa acgtgtgttt gaacagagca 2160
agcaacacgt aaacagggat gacatgcagt acccgtaaga agggccgatt ggcccacaac 2220
aacactgttc tgccgaaatg gagaccgatg atgaatatgg acgtgatcaa gagctttacc 2280
gagcagatgc aaggcttcgc cgccccctc acccgctaca accagctgct ggccagcaac 2340
atcgaacagc tgacccggtt gcagctggcc tccgccaacg cctacgccga actgggcctc 2400
aacccagttg cggccgtgag caaggtgcag gacaccccaga gcctggccgc cctgggcaca 2460
gtgccaactgg agaccgccag ccagctctcc cgccagatgc tggatgacat ccagaaggtg 2520
agcgcccctg gccagcagtt caagaagaag ctggatgtcc tgaccgcaga cggcgtcaag 2580
aaaagcacgg gcaaggcctg ataaccccctg gctgcccgtt cgggcagccca catctcccca 2640
tgactcgacg ctacgggcta gttccgcct cgggtgtggg tgaaggagag cacatgagcc 2700
aaccatctta tggcccgctg ttcgaggccc tggccaacta caatgacaag ctgctggcca 2760
tggccaaggc ccagacagag cgcaccgccc aggcgctgct gcagacccaat ctggacgatc 2820
tgggcaggt gctggagcag ggcagccagc aaccctggca gctgatccag gcccagatga 2880
actggtggca ggatcagctc aagctgatgc agcacaccct gctcaaaagc gcaggccagc 2940
cgagcgagcc ggtgatcacc ccggagcgca gcgatcgccg ottcaaggcc gaggcctgga 3000
gcgaacaacc catctatgac tacctcaagc agtcctacct gctcaccgcc aggcacctgc 3060
tggcctcggt ggatgccctg gagggcgtcc cccagaagag ccgggagcgg orgcgtttct 3120
tcaccccgca tgacgtcaac gccatggccc gcaagcaatt cctggccacc aaccccgagc 3180
tgctcaagct gaccctggag tccgacggcc agaacctggt gcgcggactg gccctcttgg 3240
ccgaggatct ggagcggagc gccgatcagc tcaaatccg cctgaccgac gaatccgcct 3300
tcgagctcgg gcgggatctg gccctgaccc cgggccgggt ggtgcagcgc accgagctct 3360
atgagctcat tcagtacagc ccgactaccg agacggtggg caagacacct gtgctgtag 3420
tgccgccatt catcaacaag tactacatca tggacatgcg gcccccagaac tccctggtag 3480
cctggctggt cgcccagggc cagaggtat tcatgatctc ctggcgcaac accggggtgt 3540
cccaggccca aatcgatctc gacgactacg tggtggatgg cgtcatcgcc gcctggacg 3600
gcgtggaggc ggccaccggc gagcgggagg tgcacgtcat cgccactgc atcgggcgca 3660
ccgcctgtc gctgccatg ggctggctgg cggcgcggcg ccagaagcag cgggtgcgca 3720
cegccaccct gttcactacc ctgctggact tctccagccc cgggggagct tggcatctca 3780
tccacgagcc catcgatagcg gcgctgaagg cgcaaaatga ggccaagcgc atcatggacg 3840
ggcgccagct ggcggctcc ttcagcctgc tgcggagaaa cagcctctac tggaactact 3900
acatcgacag ctacctcaag ggtcagagcc cgtggcctt cgatctgctg aactggaaca 3960
gcgacagcac caatgtggcg ggcaagaccc acaccagcct gctgcgcagt ctctacctgg 4020
agcaccagct ggtgaaggag gagctcaaga tccgcaacac cgcgatcgat ctcggccaag 4080
tgaagacccc tgtgctgctg gtgtcggcgg tggacgatca catcgccctc tggcagggca 4140
cctggcaggg catgaagctg tttggcgggy agcagcgcct cctcctggcg gagtcnggcc 4200
acatcgccgg catcatcaac ccgccggcgc ccaacaagta cggcttctgg cacaacgggg 4260
ccgagcgcga gagcccggag agctggctgg cagggggcgac gcaccaygga gctcctgqt 4320
ggcccgagat gatgggcttt atccagaacc gtgacgaagg gtcagagccc gtcccgcgcc 4380
gggtcccgga ggaagggctg gcccccgccc ccggccacta tgtcaaggtg cggctcaacc 4440
ccgtgtttgc ctgcccaaca gaggaggacg cngcatgagc gcacaatccc tggaagtagg 4500
ccagaaggcc cgttctagca agcgttcgg ggcggcggag gtagccgcct tcgccgcgct 4560
ctcggagcac ttcaaccccc tgcacctgga ccccgccttc gccgccaccn cggcgttcga 4620
gcggccnata gtccacggca tgctgctcgc cagcctctc tccgggctgc tgggccagca 4680
gttgccgggc aaggggagca tctatctggg tcaaagcctc agcttcaagc tgccggtctt 4740
tgtcggggac gaggtgacgg ccgagytgga ggtgacccgc cttcgccgag acaagcccat 4800
cgccaccctg accacccgca tcttcaccca aggcggcgcc ctcgccgtga cggyggaagc 4860
cgtggtcaag ctgccttaag cacccgccga acgcaggcac aatcagccgg gcccctgccg 4920
ggctgattgt tctcccccgc tcngcttgcc cnctttttcg gggcaatttg gcccaggccc 4980
tttcctgcc ccgcctaact gcctaaaatg gccgccctgc cgtgtaggca ttcatccagc 5040
tagaggaatt c                                                     5051
```

<210> 12
<211> 2849
<212> DNA
<213> Thiococcus pfennigii

Patent Law
enabling innovation

http://www.patentlaw.com

<400> 12
ggatcctggt cgcgagcgcg ccgcccagcc acctgccggc gcgccccgcc gggaccgctc 60
gaggacgcct cgcgaaggct ctaggggcrg tatcttcaag agtctacgcc cctttgttgc 120
agtgcacaaa ttttcgtgct agcttcatgc tatcacgccc cagacgagga agatttcacg 180
tgaacgatac ggccaacaag accagcgact ggctggacat ccaacgcaag tactggagga 240
cctggtcgga gctcggccgc aagacttgg gtctggagaa gaccccggcc aatccttggg 300
ccggcgccct cgatcatrgg tggcagacgg tctcgcccgc cgccccaac gacctggttc 360
gcgacttcat ggagaagctc gccgagcagg gcaaggcctt cttcggcctc acagactact 420
tcacgaaggg cctcggcggc agtagcggta cgcagggctg qcacacccta tcgaacacca 480
tcgacgacat gcaaaaggcc ttcgccagcg gccggatcga aggcgacgag acctccgcc 540
gcctgatggc cttctgggag atgccgctcg acaactggca gcgcaccatg tactcgctgt 600
cccgggtgcc cggcgacctg ctgcgcaaca tgccgcacga ccaagtcagg gacagcgtcg 660
accgcatcct ctcggcaccc gggctcggct acacgcgcga ggagcaggcc cgctaccagg 720
atctgatccg ccgctcgctg gagtaccagt cggcctgaa cgaatacaac ggcttcttcg 780
gccagctccg tgtcaagtcc ctcgagcgga tgcgcgcctt cctgcaggga caggncgaga 840
aggacgtcgc catcgagtcg gcgcgcaccc tctacgacgc ctgggtcggc tgctgcgaag 900
aggtctatgc cgaggaggtc agctccgccg actacgcgcc catccacgcc cgcctcgtca 960
acgcccagat ggccctcaag cagcgcatgt cgaccatggt cgacgaggtc ctcggcgcga 1020
tgccgctgcc gacccgcagc gagctgcgca cgctccagga tcggctccag gatgcgcgcg 1080
gcgaggtcaa gcgccagcgc caagagatcg agacgctgaa gcggcaggtc gcggccgtgg 1140
ccggcggcgc ccagccccgc ccccaggcct ccgccccagc cagcacccgg ccggccgcgg 1200
cgaccggccc ggcggcgagc gcggccgccca agcgcagcac cacgacccgc cgcaagacca 1260
ccaagcccac caccggccag tgatgtcggc cgccgtccca tcgccaccag gagaggtgc 1320
cgtgtcccca ttcccgatcg acatccggcc cgacaagctg accgaggaga tgctggagta 1380
cagccgcaag ctcggcgagg gtatgcagaa cctgctcaag gccgaccaga tcgacacagg 1440
cgtcaccccc aaggacgtcg tccaccgcga ggacaagctg gtcctctacc gctaccgcgc 1500
ccgggcgcag gtggcgaccc agacgatccc gctgctgatc gtctacgccc tcgtcaatag 1560
gcctacatg accgacatcc aggaggatcg ctcgacgatc aaggggcttc tcgccaccgg 1620
tcaggacgtc tatctgatcg actgggacta cccgatcaag gccgtacggg cgctgaccct 1680
cgatgactac atcaacggct acatcgacgg ctgcgtcgac tacctgcgcg agaccncacg 1740
cgtcgaccag gtcgaacctgc tcgggatctg ccaggcgggg gccttcagcc tctgccacac 1800
ggcctgcac tccgagaagg tcaaaaacct cgtccacatg gtcacgccgg tgacgccgg tagcctcca 1860
gaccccgggc aacctgcttt cggcctgggt ccagcaccgc gacgtcgacc tggccgtcga 1920
cacccatggc aacatcccgg gcgaactgct caactggacc ttcctgccgc tcaagccctt 1980
cagcctgacc ggccagaagt acgtccaacat ggtcgacctg ctcgacgacg aggacaaggt 2040
caagaacttc ctgccggacg agaagtggat cttcgacaac gcggaccagg ccggcgagac 2100
cttccgccag ttcatcaagg acttctacca gcgcaacggc ttcatcaacc gcggcgtcat 2160
gatcggcgat caggaggtcg acctgcgcaa catccgctgc cggttcgtga acctctaccc 2220
gatgcaggac cacctggtgc cgccgatgc ctccaaggcc ctcgcgggac tgaccrccag 2280
cgaggactac acggagctcg cctnccccgg cgggcacatc ggcatcracg tcagcgtcaa 2340
ggcgcaggaa ggagtcaccc cggcgatggg ccgtcggctg aacgaacgcg gctgagccgg 2400
gtcgaccccc ccgctcgacg ggcgcggccg gcggcatcga aggccgccgg ccggcgccca 2460
tgagccatcc gcgccgctgg cgccccccc ccgaccttcg ccgccgcacc cgcatcgccc 2520
ccgcggctgg cgtacaatga cggtcttcgc gagcgagccc cgcatcgtca acggaggctg 2580
catgggcgcc gaccaccaac tgctggccgc gtacgacgcg ctggcngaga cctacgacgc 2640
ccaccgcggc ctcttcgaca tgcgccgcgt gctcgaggac atcttcgccc gcctgccggc 2700
ctgcggcacc ctcctcgacc tcggctgcgg cgccgggggag ccgtgcgcgc gcgaccttct 2760
cgaccgcggc tggcgggtga ccgggctgga cttctgcccg gccatgctcg cctcgcggc 2820
gcgctacgtc cccgagatgg agcggatcc 2849

<210> 13
<211> 2768
<212> DNA
<213> Ralstonia eutropha

<400> 13
cccgggcaag taccttgccg acatcratgc gctggcgcgc acgcgcctgg cgcgcgccgg 60
ctgtaccgag gtctacggcg gcgacgcctg cacctgtgcc gacgcnggtc gcttctactc 120
ctatcggcgc gatggcgtga ccggccgcat ggccagcctg gtctggctgg cggactgagc 180

Patent Laws
changing innovation

http://www.uspto.gov

ccgccgctgc ctcactcgtc cttgcccctg gccgcctgcg cgcgctcggc ttcagccttg 240
cgtcggcggc ggccgggcgt gcccatgatg tagagcacca cgccaccggc gccatgccat 300
acatcaggaa ggtggcaacg cctgccacca cgttgtgctc ggtgatcgcc atcatcgcg 360
ccacgtagag ccagccaatg gccacgatgt acatcaaaaa ttcatcctcc tcgcctatgc 420
tctgggccct cggcagatgc gagcgctgca taccgtccgg taggtcggga agcgtgcagt 480
gccgaggcgg attccgcgat tgacagcgcg tgcgttgcaa ggcaacaatg gactcaaatg 540
tctccggaatc gctgacgatt cccagtttc tccggcaagc atagcgcatg gcgttctccat 600
gccgagaatgt cgcgcttgcc ggataaaagg ggagccgcta tcggaatgga cgcaagccac 660
ggccgcagca ggtgccgtcg agcgcttcca gccagttcca gggcagatgt gccggcagac 720
ccttccgctt tgggggaggc gcaagccggg tccattcgga tagcatctcc ccatgcaaag 780
tgccggccag ggcaatgccc ggagccggtt cgaatagtga cggcagagag acaatcaaat 840
catggcgacc ggcaaaggcg cggcagcttc cacgcaggaa ggcaagtccc aacccattcaa 900
ggtccacgcg gggcaattcg atccagccac atggctggaa tggtcccgcc agtggcaggg 960
cactgaaggc aacggccacg cggccgcgtc cggccattccg ggccctggatg cgctggcagg 1020
cgtccagatc gcgccggcgc agctgggtga tatccagcag cgctacatga aggacttctc 1080
agcgctgtgg caggccatgg ccgagggcaa ggccgagggc accggtcagc tgcacgaacg 1140
gcgcttcgcc ggcgacgcat ggcgcaccaa cctcccatat cgcttgctg cgccgtttcta 1200
ccctgctcaat gcgcgcgcct tgaccgagct ggccgatgcc gtcgaggccg atgccaagac 1260
ccgccacgcgc atccgcttcg cgatctcgca atgggtcgat gcgatgtcgc ccgccaactt 1320
ccttgccacc aatcccgagg cgcagcgcct gctgatccag tcgggcgggc aatcgctgcg 1380
tgccggcgtg cgcaacatga tggaagacct gacaagcggc agtcctcgca agaccgagga 1440
gagcgcgttt gaggtcggcc gcaatgtcgc ggtgaccgaa ggcgccgtgg tcttcgagaa 1500
cgagtacttc cagctgttgc agtacaagcc gctgaccgac aaggtgcacg cgagccccgt 1560
gctgatggtg ccgccgtgca tcaccaagta ctacatcctg gacctgcagc cggagagctc 1620
gctggtgcgc catgtggtgg agcaggaca tacggtgttt ctggtgtcgt ggcgcaatcc 1680
ggcagccagc atggccggca gcacctggga cgactacatc gagcacgcgg ccatccgcgc 1740
catcgaagtc gcggcgcaca tcagcggcca ggacaagatc aacgtgctcg gcttctggat 1800
gggcggcacc attgttctgg ccgcgctggc ggtgctgtgcc gcgcgggcg agcaccggc 1860
cgccagcgtc acgctgctga cbacgctgct ggacttgcc gacacgggca tcctcgaagt 1920
ctttgtcgac gaggccatg tgcagttgcg cgaggccacg ctggcggcg gcgccggcgc 1980
gcagtgcgcg ctgctgcgcg gcctgagct ggccaatacc ttctcgttct tgcgccgaa 2040
cgacctggtg tgaaactacg tcgtccacaa ctacctgaag ggcaacacgc cggtgccgtt 2100
cgacctgctg ttctggaacg gcgacgccac caacctgccg gggccgtggt actgctggta 2160
cctgcgccac acctacctgc agaacgagct caagtgtacc ggcaagctga ccgtgtgcgg 2220
cgtgccggtg gacctggcca ggatcgacgt gccgacctat atctacggct cgcgcgaaga 2280
ccatatcgtg ccgtggacgg cggccatgc ctgcgccgcg ctgctggcga acaagctgcc 2340
cttcgtgctg ggtgcgtcgg gccatatcgc cggtgtgatc aaccccgccg ccaagaacaa 2400
gcgcagccac tggactaacg atgcgctgcc ggagtcgccg cagcaatggc tggccggcgc 2460
catcgagcat cacggcagct ggtggccgga ctggacccga tggctggccg ggcaggccgg 2520
cgccgaaacgc gccgccgccg ccaactatgc caatgcgcgc tatcgccgca tcgaaccccg 2580
gcctgggcga tacgtcaaag ccaaggcatg acgcttgcat gagtgccggc gtgcgtcatg 2640
cacggccgcg gcaggcctgc aggttccctc ccgtttccat tgaaaggact acacaatgac 2700
tgacgttgtc atcgtatccg ccgccgcac cgcggtcggc aagtttggcg gctcgctggc 2760
caagatcc 2768

<210> 14
<211> 1980
<212> DNA
<213> Acinetobacter sp.

<400> 14
ctgaattcaa atcggaattt gaaaagttag ttagcgaatc tatgcctgac aataaataac 60
actgctctga aaaccatgcg ttatcaggac gaatgttacg gggaagtgtg aaaattttcc 120
cgttttagtt tcagccctgc actcaatttg attgctaaaa gccatgtgct atggagcgat 180
gaaatgaacc cgaactcatt tcaattcaaa gaaaacatac tacaattttt ttctgtacat 240
gatgacatct ggaaaaaatt acaaagaattt tattatgggc aaagcccaat taatgaggct 300
ttggcgcagc tcaacaaaga agatatgtct ttgttctttg aagcactatc taaaaaccca 360
gctcgcatga tggaaatgca atggagctgg tggcaaggtc aaatacaaat ctacccaaaat 420
gtgttgatgc gcagcgtggc caaagatgta gcaccattta ttcagcctga aagtggtgat 480

Patent Law
machine translation

http://www.patentlaw.com/

cgtcgtttta acagcccatt atggcaagaa cacccaaatt ttgacttgtt gtcacagtct 540
tatttactgt ttagccagtt agtgccaaac atggtagatg tggtcgaagg tgttccagac 600
aaagttcgct atcgtattca cttcttttacc cgccaaatga tcaatgcgtt atctccaagt 660
aacttttctgt ggactaaccc agaagtgatt cagcaaactg tagctgaaca aggtgaaaac 720
ttagtccgtg gcatgcaagt tttccatgat gatgtcatga atagcggcaa gtatttatct 780
attcgcatgg tgaatagcga ctcttttcagc ttgggcaaag atttagctta caccccctgt 840
gcagtcgtct ttgaaaatga cattttccaa ttattgcaat atgaagcaac tactgaaaat 900
gtgtatcaaa cccctattct agtcgtacca ccgttttatca ataaatatta tgtgctggat 960
ttacgcgaac aaaactcttt agtgaactgg ttcgccgcagc aaggtcatac agtcttttta 1020
atgtcatggc gtaacccaaa tgccgaacag aaagaattga cttttgcgga tctcattaca 1080
caaggttcag tggaagcttt gcgtgtaatt gaagaaatta ccggtgaaaa agaggccaac 1140
tgcattggct actgtattgg tggtacgtta cttgctgaga ctcaagccta ttacgtggca 1200
aaacgcctga aaaatcacgt aaagtctgcg acctatatgg ccacccattat cgactttgaa 1260
aacccaggca gcttaggtgt atttattaat gaaccctgtag tgagcggttt agaaaacctg 1320
aacaatcaat tgggttattt cgatggtcgt cagttggcag ttaccttcag tttactgcgt 1380
gaaaatacgc tgtactggaa ttactacatc gacaactact taaaaggtaa agaacctttct 1440
gattttgata ttttatattg gaacagcgat ggtacgaata tccctgccaa aattcataat 1500
ttcttattgc gcaatttgta ttgaacaat gaattgattt caccaaatgc cqttaaggtt 1560
aacggtgttg gcttgaatct atctcgtgta aaaacaccaa gttctttat tgcgacgcag 1620
gaagaccata tcgcaccttg ggatacttgt ttccgtggcg cagattactt gggtggtgaa 1680
tcaaccttgg tttaggtga atctgacac gtagcaggta ttgtcaatcc tccaagccgt 1740
aataaatacg gttgctacac caatgctgcc aagtttgaaa atacccaaca atggctagat 1800
ggcgcagaat atcaccctga atcttggtgg tcgcgctggc aggcatgggt cacaccgtac 1860
actggtgaac aagtccctgc ccgcaacttg ggtaatgcgc agtatccaag catggaagcg 1920
gcaccgggtc gctatgtttt ggtaaattta ttctaatcgg tcatataaca acagccatgc 1980

<210> 15
<211> 4936
<212> DNA
<213> Alcaligenes latus

<400> 15
ggttcttctc gttccggcgg gaccggggtca cggggcggca ggctgccgcc gtctggctgc 60
gccggatgaag cgggtgtcctc ggcgcgcttg cgcgccggtc gccgcgccgg cgtcccccagg 120
aagtacagga cgatggacaa ggycagtacg ccatacgcca gcagcgtgaa cacccgccgg 180
agcaaggtgc cgttgggcgc catggcttcg gncacggcca tcatcagcac cacgtacagc 240
catgccagag caaccaagta catagcaaaa acccgcaatt acgcagaatg acgtatttcg 300
tacaatgaaa actgttgtca tgatgcggta agacacgaag cctacaacgc gatccagcaa 360
cggcttcggt gaaaaagtcc tcaggagacg agcgtgacac tgcatcccat tcccgcactg 420
caacagcttg gcgacaacgc cacggcgctg agtgccgcca tctcggaagc gctgccgcgc 480
atgtcgggcc tgaacctgcc gatgccaggc atgaccaagc tacaggggca gtaccctcaac 540
gaggcgacgg cgctgtggaa ccagacgctg ggccgcctgc agccccgacgg cagcgcccaa 600
ccggccaagc tgggcgaccg gcgcttctcg gccgaggact gggccagaa cccccgccgg 660
gcctaacctgg cgcaggtcta cctgctccat gcccgcacgc tgatgcagat ggccgagtcc 720
atcgaggggcg acgccaaggc ccaggcgcgc gtgcgcttcg ccgtgcagca gtggatcgac 780
gccgcggcgc cgagcaactt cctggcgtc aatcccgagg cgcagcgcaa ggcgctgcag 840
accaaggggcg agagcatcag ccagggcctg cagcagctgt ggcatgacat ccagcaggc 900
cacgtgtcgc agacggacga gagccgtgttc gaggtgggca agaaagtcgc caccaccgag 960
ggcgcggtcg tgtacgagaa cgacctgttc cagctcatcg agtacaagcc gctgaccgcc 1020
aaggtgcacg agaagccgat gctgttagtg cagccgtgca tcaacaagta ctacatcctg 1080
gacctgcagg cggacaacag cctcatccgc tacaccgtcg cccaggtcca ccgggtgttc 1140
gtggtgagct ggcgcaaccc cgacgcctcc gtcgccggca agacctggga cgactacgtg 1200
gagcaaggcg tgatccgcgc catccgcgtg atgcagcaga tcaccgaggg ccgagaaggtc 1260
aacgcgctgg gcttctgcgt cggcggcacc atcctgagca cggcgctggc ggtgctggcc 1320
gcgccggcgc agcagccgc ggcgagcctg atgctgctga ccacgctgct ggacttcagc 1380
aacaccggcg tgctggacct gttcatcgac gaggccggcg tgccctgcg cgagatgacc 1440
atcggcgaga aggcgccaa cggccccggc ctgctcaacg gcaaggagct ggccaccacc 1500
ttcagcttcc tgcgcccgaa cgacctgttc tggaactacg tggtgggcaa ctacctcaag 1560
ggcgaggcgc cgccgccctt cgacctgctg tactggaact ccgacagcac caacatggcc 1620

Patent Laws
enabling innovation

http://www.uspto.gov/e.htm

gggcccatgt tctgctggta cctgcgcaac acctacctgg agaacaagtt gcgcgttccc 1680
ggtgccctga ccatctgcgg cgagaaggtg gacctctcgc gcatcgaggc gccggtgtat 1740
ttctacggtt cgcgcgagga ccacatcgtg ccctgggaat cggcctacgc cggcaagcag 1800
atgctgagcg gccccaagcg ctatgtcctg ggtgcgtctg gccacatcgc aggcgtgatc 1860
aacccccgc agaagaagaa gcgcagctac tggacccaag agcagctcga cggcgacttc 1920
aaccagtggc tggaaggctc caccgagcat cctggcagct ggtggacccg ctggagcgac 1980
tggctcaagc agcacgcggg caagcaaatc gccgcaccca agactcccgg caacaagacc 2040
cacaagccca tcgagcccgc ccccggcgt tacgtgaagc agaaggcctg agccgcggcc 2100
cctgagcctt ctttaacccg accttgacaa acgaggagat aagcatcgcc gacatcgtca 2160
tcgtcgccgc agcccgcacc gccgtgggca agttcggcgg cacgctggcc aagacccccg 2220
ctccggagct gggcgccgtg gtcatcaagg ccctgctgga gaagacgggc gtcaagcccg 2280
accagatcgg tgaagtcatc atgggccagg tgctggccgc cggcgcggga cagaaccccg 2340
cgcgcaaggc gatgatgaag gcgggcatcg ccaaggaaac gcgggcgctg accatcaacg 2400
ccgtgtgcgg ctccggcctc aaggccgtga tgctggccgc ccagggccatc gcctgggggc 2460
acagcgacat cgtcatcgcc ggcgccccagg agaacatgag cgccagcccg cacgtgctga 2520
tgggcagccg cgacggccag cgcatgggcg actggaagat ggtcgcacacc atgatcaacg 2580
aggtgctgtg ggaagtgtac aacaagtacc acatgggcat cacggccgag aacgtcgcca 2640
aggaacacga catcagccgc gaccagcagg acgccctggc cctggccagc cagcagaagg 2700
ccacccgcgc gcaggaagcc ggccgcttca aggacgagat cgttccggtc tcgatccgc 2760
agcgcaaggg cgacccggtg ctgttcgaca ccgacgagtt catcaacaag aagacccacc 2820
ccgaagcgct ggcgggcctg cgccgggct tcgacaaggc cggcagcgtg accgtcaacg 2880
acgcctcggg catcaacgac ggcgccgctg cggtgatggt gatgtccgcc gccaaggcga 2940
aggagctggg cctgaccgcc atcgtgcgca tcaagagctt cggcagccagc ggcctggatc 3000
cggccaccat gggcatgggc ccggtgccgg cctcgcgcaa ggcgctggag cgccgcggct 3060
tcgacgtggac ctgttcgagc tcaagcaagc cttcgccgcc caggcctgcg 3120
cggtgaacaa ggagctgggc gtggatccgg ccaagctcaa cgtcaagcgc ggtgccatcg 3180
ccatcgtgcc cccatcggc gcctccggct gcgtgctgat ctgcaccgaga 3240
tgcagcgccg ggaggccaag aggggcctgg ccgcgctgtg catcgtggcgc ggcatgggcg 3300
tgtcgctgac cgtcgtggcc tgatcagaag aaccggcgcg ccccgcgccg ccccccgcc 3360
gttccacgcg ggtgccgcgg gatacccagac gaaccsaacc accaagggct tcgagcagcc 3420
ccgaagaagg agagacagat ggcacagaaa ctggcttacg tgaccggcgg catgggcggc 3480
atcggcacct cgatgtgcca gcgctcgcac aaggacggct tcaaggtgct gtcgcgctgc 3540
ggtccgagcc gcgaccacca gaagtggatc gatgaacagg ccgcgctggg ctatcccttc 3600
tacgctccg tgggcaacgt ggccgactgg gactccaccg tggccgcctt cgagaaggtc 3660
aaggccgagc acggcaccgt ggacgtgctg gtgaacaacg ccggcatcac gcgtgacggg 3720
cagctccgca agatgagcaa ggccgattgg caggccgtga tgtcgaccaa ccttcgacag 3780
atgttcaacg tcaccaagca ggtgatcgag ggcatgctgg acaaggccg ccatccgcc 3840
atcaacatct cctcggtcaa cggccagaag gccgcagtca gccagaccaa cgtcctcgcc 3900
gccaaggccg gcatgcacgg cttctcgatg gcgctggcgc aggaagtggc ggccaaggcc 3960
gtgacggtga acaccgtgag ccgggctac atcgccacgg acatggtcaa ggccatccgc 4020
caggaogtgc tggacaagat catcgccacc attcccatcc gtcgcctggg tacgccggag 4080
gagatcgcct ccatcgtcgc ctggctggcc ggcgaggagt cgggcttcac caccggtgcc 4140
gacttcagct gcaacggcgg cctgcacatg ggctgaggcc cgccggctcca tgcccacctg 4200
cgtgggcatg gacggccga aggacccgag ctcttgcgagg gtgccggcctg caaggctgag 4260
gcclgctgcg ccgcgtgccc gcgagggcac gtgccgaagc accaaaaggc cgcgcattgc 4320
gcggcctttt ccttctgga tcggtgcgga cgggtgcgc gtaaggcagg gcagggcccc 4380
cggccttca ctccaccatg cccgacatga agtacttgat cagcccctg gccgcgaagc 4440
ccagcatgcc gaagcccagc gccaggaaca gcacgaaggt gccgaacttg ccggccttcg 4500
actcgcgcgc gagctgaaag atgatgaatg ccattgtagag catgaaggcc gtgacgccga 4560
cggtcaggcc cagtcgggca atgtttttct cgttgatttc gaacatcgtt tgttgtctca 4620
ggctgctgca cgcggctgac gtgctcgacg cgcggccggg ccccaactgc ccgcagccgt 4680
tctcgatcag gttctcaagg catctcgtgc cactgggagg tgtccaccag gtcgcggtag 4740
gcgtgccagc tcgaatgcgc cagccacgcc actaccacga tcaggcccag cagcagcgtg 4800
gccatgccca gcagcgtcag cgccatgatc agcgcgccgc acaggccag cggcagtggg 4860
tgctgcatca ccacgcgcca gctcgtgagc accgccacca gcacgcccac gtggcggtcc 4920
agcagcatcg ggatcc 4936

<210> 16
<211> 1752

Patent Laws
enabling innovation

Web Archive copy (www.wipo.int)

<212> DNA
<213> Azorhizobium caulinodans

<400> 16
atggaggcgt tcgcccagaa ccttgcgaag atggtggagg aaggcggcaa ggccgtcgcc 60
gcttacatgc gtccgcgcga ggagggcaag ccggacgaca tgacggacga tatcgccgat 120
gcgctcaaga ccatcggcga ggtggccaat tactggatgt ccgatccaaa gcgctccttc 180
gaggcccagt cgcgcctcat gatggactac atgggcgtct gggcgggggc gctccagaag 240
ctctccggcg agaaggccga gcccatcgcg aagaccgacc ccaacgacgg ccgcttcaag 300
gacccggaat gggaaagccc gttcttcgac gccctgaagc agacctatct cgtgaccagc 360
aactggcccg agtccatggt caaggaggcc gagggggtcg atccccacac caagcacaag 420
gccgaattcc tggtgcgcca gctctcgaat gcggtgggcg cctcgaacct cctcatgacc 480
aacccggagc tgatccgcga aacgctctcc tccagcgggcg agaacctcgt gcgcggcatg 540
aagaatctgg ccgaggatct ggtggagggc aaaggcgatc tcaagatccg ccagacggac 600
atgagcgcct tcgaggtcgg ccgcaatctg gcgctcagcc ccgacgaggt catcttcgag 660
accgagctga tgcagctcat ccagtatgcg ccctcgacgc ccagcgtgaa gaagacgccg 720
gtgctgatcg tgccgccctg gatcaacaag ttctacatcc tcgacctgac gcccgagaaa 780
tccctcatca agtggatggt ggatcagggg ctgacggtct tcgtcatctc gtgggtcaat 840
ccggacgccc gtctcgccga caagggcttc gacgactaca tgcgcgatgg catcttcgac 900
gcgctcgatg cggtggagaa ggcgaccggc gagcatcagg cgcacaccat cggctattgc 960
gtggtgggca cgctgctcgc ggtcacgctt gcctacatgg cggcgaccgg cgatgaccgg 1020
gtggcgagct ccacctttct caccacccag atcgacttca acccacgcgg cgatctcaag 1080
gtcttcgtgg acgaggcgca gtctctggtc atggacgtca gcatgaaggg gatgggctat 1140
cttgaaggac gcaagatggc cgacgccttc aacatgctgc ggtccaacga cctgatctgg 1200
cccttatgtg tgaacaatta tctcaaggag aagcacgcgt tcccctttca tcttctgttc 1260
tggaatgccg attccacccg catgcccggg gcgaaccact cctattacct gcgcaacktgc 1320
tatcrccaga acaacatcgc caaggggctg gcggagatcg cgggcgtcaa gatcgacatg 1380
ggcaaggtgg cgatccccgt ctattggctc gccaccgcgg aggaccatat cgccgccgcc 1440
aactccgctt atatcggtgc aggcctgctc ggcgccccg tgcgcttcgt gatgccgggg 1500
tccgccctcg gcagcagcgg cgcgttagcc gcctgcatct ggaaggactg agcgcgcctg 1560
cgtgccgggg ccgttttgcg aggcctgctg ctgcgcgagc aagcctcgcc ggtcggccaa 1620
ttcgcgtgca tggcgttttc gcttgcgcgc gggcgtgccc atgatgtaga tcacgatcga 1680
cagcggcagc agtccgtaga gtgcgaacgt gatcacgggcg ccgagtatgc tgccccgggg 1740
gctggcggcc tcggccactg catcatcag agtgacatac agccaggcga taacaacgag 1800
atacatgctc gaaccaaaaa aacgagcggg gcacgggttt tcgtggaggt ctgtgccggg 1860
caaggcgggg ctcgcctggg tcacaatcaa aacggatgcc ccgcaagccc caggctattg 1920
catggcatcc acgaacaagg atgcagcatg aattttgacc cactcgctgg ccctgtcagc 1980
caatcogtcc agcaatttctg gaacgagcaa tggagcgcga cgctgcagac actgcagcag 2040
atgggggcaac caggcctttc gggaatccag ggcatgccag gcatgccggca catgggccag 2100
gcctggaaag cggccgtccc cgaaccggc gccctgccag agaacgcgct gtcgctggat 2160
cccgaaaagc tgctggagct gcagcgccag tacctggatg gcgccaaggc catggccgaa 2220
cagggcggcg cccaggcgct gctggccaag gacaagcgct tcaatacgca atcgtgggcc 2280

<210> 17
<211> 3973
<212> DNA
<213> Comamonas acidovorans

<400> 17
cccgggcaag cggcgcagca gaccctggcc tggctgggac cctgcatcgg tccgcgctcc 60
ttcgaagtgg gagccgaggt gcgcgcggcc ttcatcgcgc atgacgcggc ggccgggggcg 120
catttcaccg ccgtggcgca agaggggcgg ggcgcaccca agtacctggc caacctggcc 180
gggcttgccc gccagcgcct ggcggcgctg ggcatcaccg ccatctacgg caatgacggc 240
ggcgacgcat ggtgcacggt gctcaacggc tcacggttct tttcgcaccg gcgcgacgat 300
gcccgcctcg gcagcagcgg cgcgttagcc gcctgcatct ggaaggactg agcgcgcctg 360
cgtgccgggg ccgttttgcg aggcctgctg ctgcgcgagc aagcctcgcc ggtcggccaa 420
ttcgcgtgca tggcgttttc gcttgcgcgc gggcgtgccc atgatgtaga tcacgatcga 480
cagcggcagc agtccgtaga gtgcgaacgt gatcacgggcg ccgagtatgc tgccccgggg 540
gctggcggcc tcggccactg catcatcag agtgacatac agccaggcga taacaacgag 600
atacatgctc gaaccaaaaa aacgagcggg gcacgggttt tcgtggaggt ctgtgccggg 660
caaggcgggg ctcgcctggg tcacaatcaa aacggatgcc ccgcaagccc caggctattg 720
catggcatcc acgaacaagg atgcagcatg aattttgacc cactcgctgg ccctgtcagc 780
caatccgtcc agcaatttctg gaacgagcaa tggagcgcga cgctgcagac actgcagcag 840
atgggggcaac caggcctttc gggaatccag ggcatgccag gcatgccggca catgggccag 900
gcctggaaag cggccgtccc cgaaccggc gccctgccag agaacgcgct gtcgctggat 960
cccgaaaagc tgctggagct gcagcgccag tacctggatg gcgccaaggc catggccgaa 1020
cagggcggcg cccaggcgct gctggccaag gacaagcgct tcaatacgca atcgtgggcc 1080

Patent Law
drawing innovation

http://www.Legal-Drawing.net/

ggcaaccccc tgacggcggc cacggccgcc acctatctgc tcaacagccg catgctcatg 1140
ggcctggccg atgccgtgca ggccgatgac aagacgcgca accgccgtgcg cttcgccatc 1200
gagcaatggc tggcggccat ggcgcccagc aacttcctgg cactcaatgc cgaggccaag 1260
aagaaggcca tcgaaaccca gggcgagagc ctggcccagg gcgtggccaa cctgctggcc 1320
gacatgcgcc agggccatgt gtccatgacc gacgagagcc tgttcaccgt gggcaagaac 1380
gtcgccacca ccgaaggcgc cgtggtgttc gagaacgagc tgttccagct catcgaatac 1440
aagccgctga cggacaaggt gcacgagcgg ccctcctcta tggtgcgcgc ctgcatcaac 1500
aagttctaca tcctggacct gcagcctgac aactcgctga tcccgctacg cgtcagccag 1560
ggcgatcgca ccttcgtcat gagctcgccg aaagccctgg gcgcaagacc 1620
tggcacaact acatcgagga cggcgtgctc accggcatcc gcgtggcgcg cgagatcgcg 1680
ggagccgagc agatcaatgt gctgggcttt tgcgtgggcg gcacccatgct gtccaccggg 1740
ctgggggtgc tgaaggcacg ccacgaccgc gagcatggcg cagttgctgc tccgggcgcc 1800
aaggcgcctg cggccaagcg cgcggctggc agccgcagcg ccgccacgcac atccacagcc 1860
cgcgccacgg cgccggccgg cgtgccgttt cccgtggcca gcgtccacgct gctgaccacc 1920
ttcatcgact tcagcgacac cggcatcctc gatgtcttca tcgacgaatc cgtggtgcgc 1980
ttccgcgaga tgcagatggg cgaggagcgc ctcatgaagg gccagggacct ggcgtccacc 2040
ttcaggtttc tgcggccaaa cgacctgatc tggaactacg tggtgggcaa ctacctcaag 2100
ggcgagacgc ccccgccgtt cgacctgctg tactggaaca gcgactccac caacctgccc 2160
ggccctact acgcctggta cctgcgcaac ctatacctgg aaaacaggct ggcccagccc 2220
ggcgcggcga ccgtctgcgg cgagcgcatc gacatgcacc agctgcgcct gccgggctat 2280
atctacggct cgcgcgagga ccacatcgtg gcgcgtcgg gctcctatgc gtccaccaag 2340
gtgctgtggg gcgacaagcg ttttgtgatg ggcgcgtcgg gccacatcgc gggcgtgatc 2400
aatcgcgccg ccaagaaaaa gcgcaggtac tggctgcgcg aggacggcca gatgccccgc 2460
acgctcaagg agtggcaggc cggcgccgac gagtaccccg gcagctggtg ggacgactgg 2520
agccctggcc tggccgagca cgcgcgcaag ctggtccgcg cgccaaagca gtacggcaag 2580
ggcagggaat acacggccat cgagccgggc ccgggccgct acgtactgct caaggcgtga 2640
ggcacaatcg ttcgatgct gcagcgccat aacgcttcgg ctggaatgca gggtgccgct 2700
gccgcgactg cggccgcgtg cgcccaggca tccctttaag agtccaaaga aaggtccgtc 2760
atcatggaag acatcgtcat cgttccgct gtccgtacta ccgttggcaa gtttggcggc 2820
accctgccca agatccccgc cacccgactg ggctccatcg tgatcgccga ggcactgaac 2880
cgtgccaagg tcggcacccg tcaggtcggt gaagtcatca tgggccaggt gctggccgct 2940
ggcgcgaggc agaaccccgc acgccaggcc atgatgaagg ccggcgttgc caaggaaacc 3000
cccgcctca ccatcaaagc cgtcigccgc tcgggcctga aggccgtgat gctggcagcc 3060
caggccgtgg gtcaccgggca cagccagatc gtcgtggccg gcgtccagga gaacatgagc 3120
ctgtcgcccc acgtgctgcc cggctcgcgc gacggccagc gcatgggcgc ctggaagatg 3180
gccgcaccca tgatcgtgga gacgtctaca accagtacca catgggcatc 3240
acggccgagg acgtggccaa ggaaaagagc gtcagccgcg agcagcagga tgcccgtgcc 3300
gtcaccgagc agcaaaaggc cacggccgcg caggaagccg gcaagttcgt ggaggaaatc 3360
gttcccgtca gcattcccca gcgcaagggc gatcccgtgg tgtrcgctgc cgacgagtac 3420
atcaaaccgca agaccaatgc ccgcgccctg gcaggccttc gccccggcctt cgaccaagcc 3480
ggctcggtga cggccggcaa cgcctcgggc ctgaacgacg gcgcggccgc cgtggtggtg 3540
atgagcgcct ccaaggccaa ggccctcggc ctgacgccgc tggcgcgcat cgtctcctac 3600
gccaccagcg gcctggaccc cgccaccatg ggcctgggcc cggtgttccc ctcgcgcaag 3660
gcgctggagc gtgcgggctg gaccgcgcag gacgtggacc tgttcgagct gaaggaagcc 3720
ttcgcggccc aggcctgtgc ggtgaaccag gagctgggca tcgacccggc caaggtcaac 3780
gtcaacggcg gcgccattgc catcgggcac cccatcggcg catcgggcgc ccgcatcctg 3840
gtgaccctgc tgcacgagat gcagcgcagc ggcgccaaga agggcctggc cggcctgtgc 3900
atcgcggcgg gcatgggcgt ggccatggcg gtggagcgcg tttgagaggc tccggggaaa 3960
cgttagcaag ctt 3973

<210> 18
<211> 3698
<212> DNA
<213> Methylobacterium extorquens

<400> 18
cgtgtccggg ttgaggctca ccccgaagcg ccgctggtag tagccggcct gggcgcggcg 60
caggccggca atgcccttgg aggcggagta gtggtcggtg cgcggcttgc cggccgtctc 120
gacgagcttc tcgatgacgt ggcgggggcgc gtcgagatcg ggattgccca tgccgagatc 180

Patent Law
machine translation

http://www.patentlaw.com/

gatgatgtcg gagccccggg ctcgggcggc ggcctttgatc cggttcacct gctcgaagac 240
gtaaggcgga aggcgcttga tgcggtggaa atcggtcatg gcgttggtct gtccggtgtc 300
gcggaactga tcctccgccg aggatgcgtc ggcggtgagg agcctgcctg tttaccatcg 360
acgcgttcac gcgccgactt aaaaatcaac atcgcgaggc cccgccacga tcgggggtgg 420
acgatcacctc caccgggttg ggcgcgagcc cctgcgcggc gtcttttggcc gcccctttcg 480
ccgcgcgccc tttggactcg ttgcggttgc gcgcgccttc cagctcggcc tgcagagcgc 540
ttttgccggc cgaattgcgg gcgcagacgg cgcgcgcggg cgcgcgattgg cctacgggca 600
tgtagctcgc atcgcccttg cgggattgcg gccacgaaat cgggcgcctc caccggattg 660
atgccgcagc ccgccccgac catcgccgcc ttcagcggat tcacgtcgcc ggagcagccg 720
ccggtcgccg ccgcggcggc gaaaaccggc aaggcgatgg cgatggcgcg gacggtgcgg 780
cgcacgttca tgacaacggt ctgaaaatgg agtctgggat tggccgacttc tggtgggtgg 840
agcgttaatt tgtcggaaac gaggctcggg ccgccccacg gggcgggatg cgggcagacc 900
ttrggyagga cgtgtcgcgt gggcaccgag cggacgaacc cggcagcgcc ggattttcgag 960
accatcgcgc gcaacgcgaa tcagctcgcg gagggtgttcc ggcaatcggc cgccgcctcg 1020
ctgaagccgt tcgagccggc gggccaggga gccctgctcc cgggcgcgaa cctccagggc 1080
gccagccgaga tcgacgagat gaccccgacc ctcacgcggg tcgcggagac arggctgaag 1140
gatccccgga aggcgcttca ggcccagacc aagctctgcc cgccgctctgg 1200
gcctcgaccc tgaccccgat gcagcgggcc gtcaccgagc ccgtcgtcca gccccgccc 1260
acggacaagc gcttcgccca tgccgattgg agcgcgaacc cggtcttcga cctgatcaag 1320
cagagctacc tgctccttgg ccgctgggcc gaggagatgg tcgagacggc cgaaggcatc 1380
gatgagcaca cccgccacaa ggcggagttc tacctgcgcc agctcctctc ggcctactcg 1440
ccctcgaact tcgtgatgac gaaccccgag ctcctcgcgc agacgctgga ggagggggcc 1500
gccaacctga tggcgcggat gaagtatgctg tggaagccgg cggcggtcag 1560
ctccggtgtc ggcagacgga cctgtccgcc ttcaccttcg gcaaggacgt ggcggtgacc 1620
ccgggcgagg tcatcttccg caacgatctg atggagtgga tccagtacgc gccacagacc 1680
gagcaggtgc tgaagcgtcc gctgctgatc gtgccggcct ggatcaacga gttctacatc 1740
ctcgatctca accgcgagaa gagcctcatc ggctggatgg tgtctcaagg gatcaccggtg 1800
ttcgtgatct cgtgggtgaa cccggacgag cgcaccgcg acaaggactt cgagtcctac 1860
atggcggaag gcatcgagac cgccatcgac atgatcgggc tggcgacccg cgagaccgat 1920
gtcgcggcgg cggtctactg cgtcgcggc agcgtgctcg cgtcaacgat ggcctaccag 1980
gcggcgaccg gcaaccgccg gatcaagagc gcgacctttcc tcaccacgca ggtcgatttc 2040
acccatgcgg gcgatctcaa ggtcttcgcc gacgaggtgc agatcaaggc gatcgaggag 2100
cggatggccg agcacggcta cctgaaaggc gcgcgcatgg ccaacgcctt caaacatgct 2160
aggcccaacg acctgatctg gtcctacgtc gtcaacaact acgtacgcgg caaggtgcag 2220
gcgcccttcg acctgctcta ctggaacgcc gacgccacgc ggatgccccgc ggccaaccac 2280
tcgttctacc tgcgcaactg ctacctcaac aacacgctcg ccaaggggca gatggtgctc 2340
ggcaacgtgc gcctcgaccc caagaaggtg aaggtgccgg tcttcaacct cgccacccgc 2400
gaggaccaca tcgcccggc gctctbggtc ttcgaaggct cggcgaagtt cggcgcgaag 2460
gtcgattacg tgctggcggg ctcgggccac atcgccggcg tcgtcgccc gcnggggccc 2520
aaggccaaat acggctttcg cacggccgc cccgccgcgc gccgttcga ggatttgggtc 2580
gcggcggcga cggagcatcc gggctcgtgg tggcctact ggtacaagtg gctcgaggag 2640
caggcgcccg agcgcgtgcc cgccccatt cctggaacgg gggcccgtcc ttcccgtgcg 2700
ccagcacccg gcaccatatgt ccgcatgaag gcgtgaggcc atgaaggtgt gagggatcga 2760
caggaacgct gcacgcactg catcgctgtt gcggacacgg gaccgtgatt tgccttatct 2820
gatcctgggg ccggctcctg ccccaggagg atagaagcgc gttgcaacac gccacccgatc 2880
tcatttcgat catcgcgctg gggctggtct gcgcgttcat cggcgcatg ctggcccagc 2940
gaatgcggct tcccccgctc gtcggctacc tcgtcgccgg catcgccatc ggccctttca 3000
cgccggtttt cgtcggcgat ccggctttag cgagccagct cgccgaactc ggcgtcatcc 3060
tgctgatgtt ccggcgtcgg cttcacttct ccatcggtga cctactcgcg tccggcacca 3120
tcgcccctgc cggtgcgatc gtgcagatca cgctggtgac cgccatgggc gcgggtctcg 3180
cctgggcctt cggctgcggg gccgggcgag gcctcgtgtt cgggctggcg ctctcggtgg 3240
cgagcactgt cgtgctgttg cgggcgctcg aaggccaggg gcttctcgac tcggacaagg 3300
gcccatcgc cgtcggctgg ctgatcgtcg aggatctcgc catggtggtg gccctggtgc 3360
tgctgccggc gttggcgccc tcgctcggcg gcgaggcgat gcaggccgcc ggccatccag 3420
gccccccgga gcacggcctg tgggtgacgc tcgggctgac gctcgccaag gtcgggcgtgt 3480
tcgtcgccgt gatgctttgtc ggcgggcggc gcctcattcc ctacctgctg ggtctggccg 3540
ccccgcacgg ctcgcgcgag ctgttcaccc tggccgtgct ggccgagcgc gtcggtatcg 3600
ccttcgcctc ctccgagctg ttcggcgtgt ccttcgccct cggcgcgttc ttcgccggga 3660
tggtgctcgc cgaatccgac ctcagccatc 3690

Patent Law
visibility innovation

http://www.patentlaw.com/

<210> 19
<211> 2712
<212> DNA
<213> Paracoccus denitrificans

<400> 19
gggccccgcgc gctggcgccc atccattcat tggtgttgcg gatcgtctcc atcgcatcat 60
agagagatga tcccctctcaa accctgtgac gtcgtcattg caaccttctc ccatgaaccc 120
gccggatttg gccttgccgg ggaaggacac ggctttacct gcgtattgtg ctgggcataa 180
tgatttttacg gttcagggag gattgtcaat tatggcgggc aaggacgaaa aaccggaagc 240
tgcgggcgcg gccgaagccg ggggcaaacc acgcagggggc cgccgggccag gggccaaggg 300
ccgtaccggg gacagcgaaa caggagccga agcctgccga ttcggaaaag ccggcgcgac 360
cgccggcgcga aaaggccgcg gtgaagaccc cgcccgagcc cgtgccggag cccgcggcgc 420
ctgccaggtc caaggcggcc gcggcctccg atccgccaca gcctgccgcc aaggccggca 480
cacgcaaacg ccgcgttgcg cgcgggcggg ggccggtcgc agcgatccgc gccccgtcc 540
gcgccgaaag ccctcgggca aggccgccgc gaaggcgcag gccgagaccg cctcgctcag 600
tatggccgac gaggcgctgc gtccgctggg cgccgtcgga cccgggcggcg gcgtgccgcc 660
catggccgcg ccccgcgccc aggctgccgc cccggcgggg accggccagt ctgcgggact 720
cgctgccgag ccgcatccag cccgaacacc gccgcctttcg tcgaggccgc cttcggtccc 780
ggcagccgcc tcccaacagc tggcccagaa catcgagccgc atcgaatcgc tgaccccagcg 840
cctgatcagc gcgctggcgc agccgcgtcc ctcgaatccc ggcgtcagga tgccgggccc 900
cgaccttttc gccaccgccga cctcggcctg gatcaagctt ctggccgagc agccccgagcg 960
ggtgatcggc cagcaggtca gctattgggg cgaaacctcg cgccattttcg ccgaggccca 1020
ggccgccttt gccccgcgca ccgtgacgcc gccgcccagc gaagggccgc gggacgcgcg 1080
ctttgccaac ccgctgtggg agggcgcatcc cttcttcaac ttcatcaagc ggcaatacca 1140
gatcaacgcc caggccctgc agggaggcgc cagcacactg gacctgcccg agatgaccga 1200
cgggcgccgg atcgaatggt tcaccccgcna gatgatcgac atgatggcgc cgacgaattt 1260
tctggccacc aatcccgacg acagctggaa aaggcgctgg agaccgaggg acgaaagcct 1320
ggtcaggggc cctgagaacc tggtgcgcga cgtcgagcag aacagcgggg agctgatcgt 1380
gtcgctggcc gacccgcatg ccttccgtgt gggcagagaac atcggccacca ccgaggggcac 1440
ggtggtcgcg cgcaccaagc tttacgagct gatccagtac aagccccacca ccgccgcagt 1500
gcatgagatc cggtggtgga tctttccgcc ctggatccaac aaatttctaca tcctcgacct 1560
caagccgcag aacagcctga tcaaatggat cgtggaccag ggccatacgc tgttcgtggt 1620
ggcctggaag aaccccgacc ccagctatgg cgacaccgge atggacgatt acgtcagcgc 1680
ctatctggag gtgatggacc gggttctgga tctgaccgac cagaaaaagc tgaatgcggt 1740
gggctattgc atcgccggca ccacctggc gctgaccect gtcgtgctga agcagccgcg 1800
cgacgacccg gtcgaacgcg ccacctttct cacccgcgcg accgatttcg ccgaccaggg 1860
cgagttcact gcctatctgc aggaggattt cgtctccagc atcgaggagg aggcggcgcg 1920
gacccggcatc ctggggcgcc tccgcagcta catgctgggc gagacgccgc cggccttcga 2040
cctgctgttc tggaaaggcg acggcaccaa cctgcccccgg cgcatggccg tggaatacct 2100
gcgcggcctg tgccagcaga accgcttcgt caaggaggcg ttcgatctga tgggccaccg 2160
cctgcatgtc ggcgacgtga ccgtgccgct ttgcgccatc gcctgcgaga ccgaccatat 2220
cgccccctgg aaggacagct ggcgcgtcat cgccgcagatg ggctccaggg acaagaacct 2280
catcctgtcc gaatcgggcc atatcgccgg catcgtcaac ccgcccagca agaagaaata 2340
cggccattat acctccggacg ccggtttcgg tcaggtcgag cagcactggc tggacaaggc 2400
cagccatcac gagggcagct ggtgggccg ctgggggcgaa tggctggccc ggcgggcggg 2460
gggcatggtc gatgcccgcg acccgggcga gggcttcggc cctgcgccgg gcctttaagt 2520
ccacgacgcg gcgtaaaatt tttctgcacc gcagcaagaa aaccttgcaa tgctgcggtg 2580
cagaaagrat atgttggaca gaacagttca acggtgccg aagcttcgcg ccgacctagg 2640
agagagcaaa tggccaagac ccctgacttt accaagacca tgcaagaagt tatggcgaaa 2700
ttcccggtcg ac 2712

<210> 20
<211> 2587
<212> DNA
<213> Zoogloea ramigera

Patent Law
http://www.patentlaw.com

<400> 20
gtcgacctgg gcaaggtcgg gccgcagcaa gtgcccgagg cggacgccag catgaccacc 60
atcgccggca aggtgctg gtgatgacgg ccgactgcct gccggtgctg ttttgcgaca 120
cgcgcggcac cgttcgtggc tgccgccgac gccggtcggc gcggcctggc cgctggcgtg 180
ctggaaaaca cctacgcgag cagtgcgcgt ccgcggcgcc ggcgactgat ggcctggatg 240
gggccggcca tcggcgccta ccagttcgag gtgggcggcg atgtgcgcca ggcctttctg 300
cagaccgcac ctgacgattc aagcgtgcgg cacgtgacgg cagcgtttac gccactcgaa 360
cacggccgg gcaagttcct ggccgacatc tacgcgctgg ccccgccatcg catgctgcgc 420
gcggccgtgg cgcaagtgca tggcgccgaa tactgcacgg tggccaattc cgggcgcttc 480
tattcgttcc gtcgcgacgg cgtcaccgga cgccaggcaa gtttgatctg gctcaaataa 540
gtatcaggta gggggcgctg gacttttag cgtctcgcgc cgccgtgtcgc gctttgcggc 600
gtgcttctc ttgcccgttc ccgcgatgta aatcaaggtc cccagcggca gcacgcaata 660
gaacaaaaac gcaatagcaa caatcagcat gtagcaaccc aggttaagag atattcaata 720
ttttttagg gaatcacaca tgaatttgcc cgatccgcaa gccattgcca acgcctggat 780
gtcccaggtg ggcgacccca gccaatggca atcctggttc agcaagcgcc ccaccacgga 840
ggcgaacccg atggccacca tgttgcagga tatcggcgtt gcgctcaaac cggaagcgat 900
ggagcagctg aaaaacgatt atctgcgtga cttcaacgcg ttgtggcagg attttttggc 960
tggcaaggcg ccagccgtcc agcgacgcg cttcagctcg gcagcctggc agggcaatcc 1020
gatgtcggcc ttcaatgnog catcttacct gctcaacgcc aaattcctca gtgccatggt 1080
ggaggcggtg gacaccgcac cccagcaaaa gcagaaaata cgctttgccg tgcagcaggt 1140
gattgatgcc atgtcgcccg cgaacttcct cgccaccaac ccggaagcgc agcaaaaact 1200
gattgaaacc aagggcgaga gcctyacgcg tggcctggtc aatatgctgg gcgatatcaa 1260
tatgctgggc gatatcaaca acggccatat gtcgtgtcg gacgaatcgg cctttgaagt 1320
gggccgcaac ctggccatta ccccgggcac cgtgatttac gaaaatccgc tgttccagct 1380
gatccagtac acgccgacca cgccgacggt cgccgtgttg cggtgcttga tggtacgcgc 1440
gtgcatcaac aagttctaca tcctcgacct gcaaccggaa aattcgctgg tgcgctacgc 1500
ggtggagcag ggcaacaccg tgttcctgat ctcgtggagc aatccggaca agtgctggc 1560
cggcaccacc tgggacgact acgtggagca gggcgtgatc gaagcgatcc gcatcgtcaa 1620
ggccgtgagc ggccaggaca agctgcacat gttccgcttc tgcgtgggcg gcaccatcgt 1680
tgccaccgca ctggcggtac tggcggcgcg tggccagcac ccggcgggca gcctgacctt 1740
gctgacccac ttcctcgact tcaagcgcac cgggtgctcg acgtcttgtc gagaaaccca 1800
ggtcgcgctg cgtgaacagc aattcgcgca tggcggcctg atgccgggcc gtgacctggc 1860
ctcgaccttc tcgagcctgc gtccgaacga cctggtatgg aactatgtgc agtcgaatta 1920
cctcaaaggc aatgagccgg cggcgttga cctgctgttc tggaatccgg acgacaccaa 1980
tttgccgggc ccgatgttct gctggtacct gcgcaacacc tacctggaaa acagcctgaa 2040
agtgccgggc aagctgacgg tggccggcga aaagatcgac ctcggcctga tcgacaccaa 2100
ggccttcatc tatggttcgc gcgaagacca catcgtgccg tggatgtcgg cgtacggttc 2160
gctcgacatc ctgaaccacg gcaagccggg ccgcaaccgc ttcgtgctgg gcgcgtccgg 2220
ccatatcgcc ggcgtgatca actcggtggc caagaacaag cgcacgtact ggatcaacga 2280
cggtgggccc gccgatgccc aggccttggt cgatggcgcg caggaagtgc cgggcagctg 2340
gtggccgcaa tgggccgggt tcctgaccca gcatggcggc aagaaggtca agcccaaggc 2400
caagccaggc aacgcccgct acacgcgcat cgaggcggcg cccggccgtt acgtccaaagc 2460
caaggtgctga ccacgggggaa ctgccagact acccgactcg gctattggaa gcgttgcaat 2520
aaatgccagc actattgcga gttttgcaa tctttctact ttcccctcta taataggatc 2580
cgtcgac 2587

<210> 21
<211> 3187
<212> DNA
<213> Aeromonas caviae

<400> 21
agatctggac cgggtgtcg gcctgggcca cgccggcgag ggccagcgcg gagcaacgga 60
gcagcagggc gagaggtttc atcgggattc cttggcagtc tgaatgacgt gccagcctat 120
cagcgcggcg ccggtgcggc gagggcgcgc cggacccagt gcgtcacctc tcgtcgatc 180
cgcctcctc gacgggcgtc gctgacaaaa aaattcaaac agaaattaac atttatgtca 240
tttacaccaa accgcatttg gttgcagaat gctcaaacgt gtgtttgaac agagcaagca 300
acacgtaaac agggatgaca tgcagtaccc gtaagaaggg ccgattggcc cacaacaaca 360
ctgttcgcc gaactggaga ccgatgatga atatggacgt gatcaagagc tttaccgagc 420

Patent Lens
Machine Translation

http://www.patentlens.net/

agatgcaagg cttcgccgcc ccgctcaccc gctacaacca gctgctggcc agcaacatcg 480
aacagctgac ccggttgcag ctggcctccg ccaacgccta cgccgaactg ggcctcaacc 540
agttgcaggc cgtgagcaag gtgcaggaca cccagagcct ggcagcctcg ctgcacagtgc 600
aactggagac cgccagccag ctctccggcc agatgctgga tgacatccag aagctgagcg 660
ccctcggccg gcagttcaag gaagagctgg atgtcctgac cgcagacggc atcaagaaga 720
gcacgggcaa ggcctgataa ccccctggctg cccgttcggg cagccacatc tccccatgac 780
tcgacgctac gggctagttc ccgcctcggg tgtgggtgaa ggagagcaca tgagccaacc 840
atcttatggc ccgctgttcg aggcctggc ccactacaat gacaagctgc tggccatggc 900
caaggcccag acagagcgca ccgccaggc gctgatgcag accaatctgg acgatctggg 960
ccaggtgctg gagcagggca gccagcaacc ctggcagctg atccaggccc agatgaactg 1020
gtggcaggat cagctcaagc tgatgcagca caccctgctc aaaagcgcag gccagccgag 1080
cgagccggtg atcaccccgg agcgcagcga tcgccgcttc aaggccgagg cctggaggga 1140
acaacccatc tatgactacc tcaagcagtc ctaccgccag cgtctgctgc accgccaggc acctgctggc 1200
ctcggtggat gccctggagg gcgtccccca gaagagccgg gagcggctgc gtttcttcac 1260
ccgccagtac gtcaacgcca tggccccgag caacttcctg gccacccaac ccgagctgct 1320
caagctgacc ctggagtccg acggccagaa cctggtgcgc ggactggccc tcttggccga 1380
ggatctggag cgcagcgccg atcagctcaa catccgccgt accgacgaat ccgccttcga 1440
gctcgtggcg gatctggccc tgaccccggg ccgggtggtg cagcgcaccg agctctatga 1500
gctcattcag tacagccgca ctaccgagac ggtggccaag acacctgtgc tgatagtgcc 1560
gccttcatc aacaagtact acatcatgga catgcggccc cagaactccc tggtcgcgatg 1620
gctggtcgcc cagggccaga cggtattcat gatctcctgg cgcaaccccg gcgtggccca 1680
ggccaaaatc gatctcgacg actacgtggt ggatggcgtc atcgccgccc tggacggcgt 1740
ggaggcggcc accggcgagc gggagggtgca cggcatcggc tactgcatcg gcggccagcgc 1800
cctgtcgctc gccatgggct ggctggcggc gcggcgccag aagcagcggg tgacgaccgc 1860
caccctgttc actaccctgc tggacttctc ccagccccgg gagcttggca tcttcatcca 1920
cgagccccatc atagcgggcgc tcgaggcgca aaatgaggcc aagggcatca tggacgggcg 1980
ccagctgggcg gtctccttca gcctgctgcg ggagaacagc ctctactgga actactacat 2040
cgacgactac ctcaaggggtc agagccccgt ggcctttgat ctgctgcact ggaacagcga 2100
cagcaccaat gtggcgggca agaccccaca cagcctgctg cgccgtctct acctggagaa 2160
ccagctggtg aaggggtagc tcaagatccg caacaccccc atccgatctcg gcaaggtgaa 2220
gaccccctgtg ctgctggtgt cggcggtgga cgatccacatc gccctctgcc agggcaccctg 2280
gcagggcatg aagctgtttg gcgggggagca gcgctctccc ctggcggagt ccggccacat 2340
cgccggcatc atcaaccccgc cggccgccaa caagtacggc ttctggcaca acgggggccga 2400
ggccgagagc ccggagagct ggctggcagg ggcgacgcac caggggcgct cctggtcgcc 2460
cgagatgatg ggctttatcc agaaccgtga cgaagggtca gaggccgtcc cggcgcgggt 2520
cccggaggaa gcgctggccc ccgccccagg ccactatgtc aaggtgcggc tcaaccccgt 2580
gtttgcctgc ccaacagagg aggacgccgc atgagcgcac aatcccctgga agtaggccag 2640
aagccccgtc tcagcaagcg gttcggggcg gcggaggtag ccgcctcgcc gcgcctctcg 2700
gaggacttca accccctgca cctggaaccg gcctlcgccg ccaccacggc gttcgagcgg 2760
cccatagtcc acggcatgct gctcgccagc ctctttctcg ggatgctggg ccagcagttg 2820
ccgggcaagg ggagcatcta tatggctcaa agccrcagct tcaagctgcc ggtctttgtc 2880
ggggacgagg tgacggccga ggtggaggtg acccgccttc gcgagtacaa gccatatgcc 2940
accctgacca cccgcatctt caccccaggc ggcgccctcg ccgtgacggg ggaagccgtg 3000
gtcaagctgc cttaagcacc ggcggcacgc aggcacaatc agccggccc ctgccgggct 3060
gattgttctc ccccgctccg cttgcccccct ttttcgggtgc aatttggccc aggcccttte 3120
cctgccccgc ctaactgcct aaaatggccg ccctgccgtg taggcattca tccagctaga 3180
ggaattc 3187

<210> 22
<211> 2535
<212> DNA
<213> Rattus norvegicus

<400> 22
gagcagtacc ccggccactg ccagtgtgtg cgtggtgcag gatagactca tggcttcgcc 60
tctgaggttc gacgggcgtg tggtcctggt caccggcgcc gggggaggct tgggcagagc 120
ttatgccctg gcttttgcag aaagaggagc attagttgtt gtgaatgact taggagggga 180
cttcaaaggc gtrgggaaag gctcttctgc cgcagacaag gtcgtggaag aaatcaagaag 240
gagaggcggg aaagcggtgg ccaattacga ttcaggcgaa gcaggcgaga agcttgtgaa 300

Patent Law
drawing innovation

http://www.uspto.gov

gacagcactg gacacattcg gcagaataga tgttgtggtg aacaatgcrg ggatcctgag 360
ggaccgttcc ttctctagga taagtgatga agactgggat ataattcaaa gagttccttt 420
gcgggctctc ttccaagtga ccgggcagc atgggatcat atgaagaagc agaattatgg 480
aagaatcatt atgacggcct cagcttctgg aatatacagc aactttggcc aggcaaatta 540
tagtgctgca aagctgggcc ttctgggtct cgccaatact ctcgtgattg aaggcaggaa 600
gaacaacatt cattgtaaca ccattgcccc aaacgctggg tcacggatga cagagacggt 660
gatgccagaa gacctcgttg aagcccgaa gccagagtat gtggcaccgc tgcctctttg 720
gctttgccat gagagctgtg aggacaatgg tggcttgttt gaggttggag caggatggat 780
tggaaaattg cgctgggaga ggacccrggg agccattgtc aggaagcrgga atcagcccat 840
gactcccgag gcagtgaggg acaactgggt ggagatctgt gacttcagca atgccagcaa 900
gccgaagagc attcaagagt ccaccggtgg tataatcgaa gttttacata agaatagattc 960
agaaggaatc tcacaaaatc acaccggtca agtggcatct gcagatgcat caggatttgc 1020
tggcgtcgtt ggccacaaac ttccttcatt rtcttcttca tatacggaac tgcagtgcat 1080
tatgtatgcc ctcggagtag gagcttcagt caaaaatcca aaggacttga agtttgttta 1140
tgaaggggagt gctgacrtct cctgtttgcc tacatttgga gtcatttgtg ctcagaagtc 1200
cttgacggagt ggaggcttag cagagttcc tgggctgtca atcaactttg caaaggttct 1260
tcatggggag cagtacttgg agttgtatac gccacttccc cgatcagggg aattaaaatg 1320
tgaagcagtt attgctgaca tcctggataa aggctctggc atagtgattg ttatggacgt 1380
ctattcttat tctggcaagg aacttatatg ctataatcag ttctttctgt tcgttgttgg 1440
ctctggaggc tttggtggaa aacggacatc agaaaaactc aaagcagctg tagcagtacc 1500
ggatcggcct ccagatgctg tactgagaga taccacttca gtgaatcagg ccgctctgta 1560
ccgcctcagt ggagactcga atcctttaca catttgaccc agcrttggca gcattgccgg 1620
ttttgagaaa cccatattac acggattatg tacttttggg ttttctgcaa ggcatgtttt 1680
acagcagttt gcggataatg atgtgtcaag attcaaggcc attaaggttc gttttgccaa 1740
accagtgtat ccaggacaaa ctctacaaac tgagatgtgg aaggaaggaa acagaattca 1800
ttttcaaacc aaggtccaag agactggaga cattgtcatt tccaatgcat atgtggatct 1860
tgtrcctaca tctggagttt ccgctcagac accttctgag ggtggagcac tgcagagtgc 1920
tcttgtattt ggggaaatag gtcgtcgcct caaggatgtt ggacgtgagg tggtaaagaa 1980
agtaaatgct gtatttgaat ggcatatcac gaaaaatggg aatgttgcag ccaagtggac 2040
cattgacctg aagacggct ctggagaggt ttaccaaggc cctgccaarg gctctgctga 2100
cacgacaatc acaattctg atgaggattt catggaagtg gtcctggtca agcttaaccc 2160
acagaatgcc ttcttcagtg gcagactgaa ggcccgagga aacatcatgc tgagccagaa 2220
gctacagatg atttgaaag actatgccaa gctctgaagg acccactgcg tgcttaata 2280
aaaccagaat cattacgttc tgtctacgca gtcatgctcc agccttcttt gaaacgatcc 2340
acggtaatgt gcagcagaaa tcgcrtaaca ttttcagatt cagataactt tcagattttc 2400
attttctact aatttttcac atattatttt tataaggaac tgtaatctag ctagcaaata 2460
attgttctgt tcatagatct gtatcrtaat aaaaaaaaag tcaaccgaaa aaaaaaaaaa 2520
aaaaaaaaaa aaaaa 2535

<210> 23
<211> 2328
<212> DNA
<213> Ralstonia eutropha

<400> 23
ctgcaggttc cctccgttt ccattgaaag gactacacaa tgactgacgt tgtcatcgta 60
tccgccgccc gcaccgcggt tggcgagttt ggcggctcgc tggccaagat cccggcaccg 120
gaactgggtg ccgtggtcat caaggcccgcg ctggagcgcg cggggctcaa gccggagcag 180
gtgagccgaag tcatcatggg ccaggtgctg acggccggtt cgggccagaa ccccgcgcgc 240
caggccgcga tcaaggccgg cctgccggcg atggtgccgg ccatgaccat caacaaggtg 300
tgcggctcgg gcctgaaggc cgtgatgctg gccgccaacg cgatcatggc gggcgacgcc 360
gagatcgtgg tggccggcgg ccaggaaaac atgagcgccg ccccgcacgt gctgccgggc 420
tcgccgcgat gtttccgcat gggcgatgcc aagctggtcg acaccatgat cgtcgacggc 480
ctgtcgggacg tgtacaacca gtaccacatg ggcatcaccg ccgagaacgt ggccaaggaa 540
tacggcatca cacgcgaggc gcaggatgag ttcgccgtgg cgtcgcagaa caaggccgaa 600
gccgcgcaga aggccggcaa gtttgacgaa gagatcgtcc cggtgctgat ccccgcagcgc 660
aagggcgtcc cggtggcctt caagaccgac gagttcgtgc gccagggcgc cacgctggac 720
agcatgtccg gcctcaagcc cgccttcgac aaggccggca cggtgaccgc ggccaacgcc 780
tcgggcctga acgacggcgc cgccgcggtg gtggtgatgt cggcggccaa ggccaaggaa 840

Patent Law
machine translation

http://www.wipo.int/

ctgggcctga cccgctggc cacgatcaag agctatgcca acgccggtgt cgatcccaag 900
gtgatgggca tgggccccgt gccggcctcc aagcgcgccc tgtccgcggc cgagtggacc 960
ccgcaagacc tggacctgat ggagatcaac gaggccttcg ccgccgaggc gctygccgtg 1020
caccagcaga tgggctggga cacctccaag gtcaatgtga aggcggcgc catcgccatc 1080
ggccacccga tcggcgcgtc gggctgccgt atcctggtga cgctgctgca cgagatgaag 1140
cgccgtgacg cgaagaaggg cctggcctcg ctgtgcatcg gcggcggcat gggcgtggcg 1200
ctggcagtcg agcgcaaata aggaaggggt tttccggggc cgccgccggt tggcgccgac 1260
ccggcgacga taacgaagcc aatcaaggag tggacatgac tcagccgatt gcgtatgtga 1320
ccggcggcat gggtggtatc gaaaccgcca tttgccaacg gctgaccaag gatggctttc 1380
gtgtggtggc cggttgcggc cccaactcgc cgcgccgcga aaagtggctg gagcagcaga 1440
aggccctggg cttcgatttc attgcctcgg aaggcaatgt ggctgactgg gactcgacca 1500
agaccgcatt cgacaaggtc aagtccgagg tcggcgaggt tgatgtgctg atcaacaacg 1560
ccggtatcac ccgcgacgtg atgttccgca agatgaccga ggcgcgactgg gatgcggtga 1620
tcgacaccaa cctgacctcg ctgttcaacg tcacccaagca ggtgatcgac ggcatggccg 1680
accgtggctg gggccgcatc gtcaacatct cgtcggtgaa cgggcagaag gccgagtacg 1740
gccagaccaa ctactccacc gccaaggccg gcctgcatgg cttcaccatg gcaatggcgc 1800
aggaagtggc gaccaagggc gtgaccgtca acaccgtctc tccgggctat atcgccaccg 1860
acatggtcaa ggcgatccgc caggacgtgc tcgacaagat cgtcgccgacg atccccggtca 1920
agcgcctggg cctgccggaa gagatcgcct cgatcttgtg ctggtggagt 1980
ccggtttctc gaccggcgcc gacttctcgc tcaacggcgg ccgcatatag ggctgacgtg 2040
ccggcctggt tcaaccagtc ggcagccggc gctggcgccc gcgtattgcg gtgcagccag 2100
ccgcggcgcac aaggcggcgg gcgtttcgtt tcgccgccgg tttcgccggc cgtcaaggcc 2160
cgcgaatcgt ttctgccgcc gcggcattcc tcgttttttg cgccaatttca ccgggttttc 2220
cttaagcccc gtcgctttttc ttagtgcctt gttgggcata gaatcaggcc agcggcgcag 2280
ccagcaccat gttcgtgcag cgcggccctc gcgggggcga ggctgcag 2328

<210> 24
<211> 1462
<212> DNA
<213> Raphanus sativus

<400> 24
gactagtcgc gccgtctctg aactgaagta caagattttcc cgatggccca ttcagcagat 60
tcctccgaca atcccagaga tgttgcatcc gtcggtgttg cacgcactcc tatgggtggc 120
tttctcggat ctctctcctc cttaccgcgc acaaagcttg gatcccttgc catcacagct 180
gctctgaaga gagaaatgtt gaccccgtctc tggtccaagg aagttgtgtt tgggaatgtt 240
ctcagtgcta atttgggtca agcttcccgct cgtccaggcg ctttaggtgc tggtatctct 300
aactctgtta tctgtaccac tgtccaacag gtcttgtgcct caggcatgaa agctgtgatg 360
attgctgctc agagtatcca gctggggatc aatgatgtag tcgtggcggg tggtatggaa 420
agcatgtcta atacacccaaa gtatcttgca gaagcaagaa aaggatctag gtttggtcat 480
gattctctcg tagatggcat gctaaggat ggacgtgtgg atgtctataa cgaatgtggg 540
atgggaagct gtgcagagtt atgcgctgag aagtttgaga taaccaggga gcagcaagat 600
gattacgctg ttcagagctt tgagcgtggt attgctgctc aggaatctgg cgccttcaca 660
tgggagatcg tccggttga agtttctgga ggaaggggta ggccatcaac catlgttgac 720
aaggatgaag gtcttgggaa gttigatgct gcaaaactga ggaaactccg tccgagtttc 780
gggagaatg gaggcacagt tacagctgga aatgcctcta gcataagtga tggtgcagct 840
gctattgtcc tagtgagtgg agagaaggcg cttcagctag gacttcaagt acttgcaaaa 900
gttaaaggtt atggtgatgc agctcaggag ccagagtttt tcactactgc tcctgctctg 960
gcaatacaaa aagctattgc acccaattcg ccctatagtg agttgattca agttgattac 1020
tatggagtca atgaagcatt tgcagttgta gcacttgcaa atcaaaagct acttgggatt 1080
agtccggaga aggtgaatgt aaatgtgagga gccgtcctct taggacatcc tctaggctgc 1140
agtggagccc gtattctaat cacattgctt gggatactga agaagaaaaa cggcaagtac 1200
gttgtgggag gagtgtgcaa cggacgagga ggtgcttctg ctcttgttct tgaagtcgtg 1260
tgatgcattt atatgaatcc cagggtgttg aacratatag agcgtatcta ctatcarttct 1320
accaacttgc acttcaagtt tgatatttggt tggtctctct caataaatga gtgatgatga 1380
tctttgatgt tgttaagttt atttagttar attatatgaa aactatgttt ctgttaaaaa 1440
aaaaaaaaaa aaaaaaaaaa ac 1462

Patent Law
machine translation

http://www.patentlaw.com/

<210> 25
<211> 1440
<212> DNA
<213> Pichia membranifaciens

<400> 25
atggcactcg tctgcgcag gttcttctcc ggctccgtgg ccagggccac ggcgccagcc 60
agcctgatca agctccagcc ggtctcgcag ctcaaacagg gacagctgcc cacctacgtg 120
ggccagtcga actcgatcgt gaagtcgctg gtgtggacca cgccgcccaa caacgtgctc 180
attgtgaagg agccgtggca ctcccaggtg ctcgacgccg ccatcaccct catcaagcat 240
ctccacgcaa actacccgtc cgtgaacatc atcgtggtgc ccgaggtcgc cgaggagctc 300
aactcgatcg aacgcaagag ctccgaccca gacacgccca tcggcatcta cacaggcccg 360
ctcaacgaga tcatctccaa gacagacctc attgtctccc tcggcggaga cggcaccatc 420
ctccgtgggcg tgtcgctctt ctccaacacg acggtcccac ccgtcttgtc cttctccctc 480
ggcacactag ggttccttct cccgttcgac ttcaacaact acgcggaggc gttcaaacag 540
atgttcgagt cccgctccag catcctcaaa agagaacgca tagagtgcca catcgtcaag 600
gctagcccgc aatcggaggc gctcaaccag cagcggaagg acctcgaaag gtcctaccag 660
aacacacgct ccctaaacgc acaagaagag gtggaaaggt tgaagcgctt gtccgcagcc 720
atggatgctc ggttcgaaaa tctgacagtc tcctccgagc tcgaggccct caagaaattg 780
aaaatccacg ccatgaacga cattgtcctc cacagaggct ctctcccggg attggtccac 840
ctcgacgtct acatcaacgg caacctactc acacggacaa ccgcagacgg cctcatcttt 900
gccacccaaa caggctccac agcgtactct ctttcggcag gcggttccat cgtccaccca 960
gtcgtcaagt ggatcctttt gaccccgatg tgtccgcgaa gcttgttcct caggcccttg 1020
atcctcccac taaactccca tatcttgatc aaggtcatcg gcaaggaaaa cgtgaagatc 1080
gactacacca agtgcaacgc caaattgagc atagacggaa ttccgcaact gaaaatggtc 1140
cccgggcacg agatccacat catctccgag tccgtctcca gacttaactc cgtaaacgac 1200
gacgaagacg acatcgcctc cggaacaact gcagacgcac cggactgcgt caatgcttcc 1260
actactgtct cgaaggaatc taagacgaag tctctgggaa gacgccgtgg cgtccaaaag 1320
agaacgccg aacgaagtgg cgtctggtgt gttgtccaga gtaaggcga ctgggtcaac 1380
ggcatcaacg gaatgttggg attccaccta ggattcaagt cttccaagtc caacaaatga 1440

<210> 26
<211> 3967
<212> DNA
<213> Saccharomyces cerevisiae

<400> 26
gatcaattct gttaagctct ttacgcatgc ttttatttta ttcactttgg cacattcgct 60
aaagagaaag cgtttgatag ccgctttgc gatttggtcc tatggtatct ttacactatt 120
catcaatcaa aaaatgaaaa atctccccct taataatatt gctatcatcc taagtcccat 180
ggatcaatgg tataagggta tcgttcctcg atgggatttt tttttcaatt ttacattatt 240
gcgtttgtta agttactcca tggatttttt ggaaagatgg catgaacaat tgagccgcca 300
accttcgata gattacgatg atagacgacc tgaattccag aaaagtttat ccggttctac 360
tctacaaacc atttatgagt caggtaagaa tgttctggag gaaaaggaac gactggtagc 420
agaacatcac atccaggatt acaacttta caatttatc gcttatatta ctaagcgcgc 480
attgttttta gtgggccaaa ttatcacttt taatgactac cttatatcaa cagaaaataa 540
gcttccttcg ctaacgaaaa aaaacatagg cttctatgcc ctcaaagtat tttcgagttt 600
gcttttgatg gaaattatcc tacattatat ctatgtgggt gcaatagcaa ggacccaggc 660
atggaacaat gatacacccc tgcaacaggc tatgatcgcg ctgttcaact tgaacattat 720
gtatttaaaa cttttgatcc catggaggct ctttcggctg tgggccatgg tcgatggtat 780
tgatgcacct gaaaatatgc tacgatgtgt ggataataat tatagtacag tgggattctg 840
gagagcctgg catacaagtt ttaacgagtg ggtaatccgt tacatctatg ttccatttgg 900
cgggtccaat aacaaaatat taacgagctt tgccgtattc tcatttgtag caatatggca 960
tgacatccaa ttacgagtgt tgttttgggg gtggttaacc gtccttttat tattaggcga 1020
aacctacatt actaactgtt ttagtagata tagattcaga agctggtaca ggtttgtttg 1080
cggtatcggt gctgcaataa atatttgcat gatgatgatt attaatgtct atggatttty 1140
cttgggtgca gagggaacga agcttctatt gaagggcata tttaacaatt cacatagtcc 1200
ggagttttty actgcggtaa tggtaagcct atttattgct gttcaggtaa tgtttgagat 1260
tagagaagaa gaaaaaagac atggcatcaa cttgaaatgt tgatcttagtt attagataag 1320

Patent Law
machine translation

http://www.wipo.int/


```
ctatgaaagt caatcctttt aatcgagaat gtaaatatgt ggaatacaca attttaaaca 1380
aagtactata tatgcgttac gagtaattta aatttaagtt cacggaagta aaacraactg 1440
caagattgtt acaaagaaca atgcactatt taaatcacac aatggctatt gaaaactgta 1500
actgtcagaa atgctgcatg tatctatatg catcactaag ttgcgacttt taagaaactt 1560
ccacagttct caactcttct ttgtgctttt cacaatttct cataccttgc cgaaatctac 1620
aaattgaaaa aaaaatraaa ataaaaaaag gcaggagaag actaagtatt cattattcgc 1680
tgtttcataa atagaaggat aaaaaggtta agtgatactga ttaaaatgtt tgtcagggtt 1740
aaarrgaata aaccagtaaa atggtatagg ttctatagta cgttggattc acatttccrta 1800
aagttacaga gcggcrcgaa gtttgtaaaa atagagccaa tgaatgagtt aggagtagt 1860
tcatcagcag atttcgtgtc occaccaaat tccaaattac aatctttaat ctggcagaac 1920
cctttacaaa atgtttatat aactaaaaaa ccatggactc catccacaag agaagcgatg 1980
gttgaattca taactcattt acatgagtca tacccccgagg tgaacgtcat tgttcaaccc 2040
gatgtggcag aagaaatttc ccagqatttc aaatctcctt tggagaatga tcccaaccga 2100
cctcatatac tttatactgg tcctgaacaa gatatcgtaa acagaacaga ctttattggtg 2160
acattgggag gtgatgggac tattttacac ggcgtatcaa tgttcggaaa tacgcaagtt 2220
cctccggttt tagcatttgc tctgggcaat ctgggctttc tatcaccgtt tgatttaag 2280
gagcataaaa aggtcrttca ggaagtaatc agctctagag ccaaatgttt gcatagaaca 2340
cggctagaat gtcatttgaa aaaaaaggat agcaactcar ctattgrgac ccatgctatg 2400
aatgacatat tcttacatag gggtaattcc cctcatctca ctaaccttgg cartttcatt 2460
gatgggaaat ttttgacaag aacgacagca gatggtgttg cattggccac tccaaggggt 2520
tcaacagcat attcattatc agcaggtgga tctattgttt ccccattagt ccctgctatt 2580
ttaatgaaac caatttgtcc tcgctctttg tcattccgac cactgatttt gcctcattca 2640
tcccacatta ggatagagat aggttccaaa ttgaacccaa aaccagtcaa cagtgrggta 2700
aaacttttctg ttgatggtat tcctcaacag gatttagatg ttggtgatga aatttatgtt 2760
atcaatgagg tcggcactat atacatagat ggtactcagc ttccgacgac aagaaaaact 2820
gaaaatgact ttaatcattc aaaaaggcct aaaaggtcag ggatttatrg tgtcgccaag 2880
accgagaatg actggattag aggastcaat caacttttag gattccaattc tagctttagg 2940
ctgaccaaga gacagactga taatgsttaa acgctctgaa tgcaaagatt caatgagatt 3000
ctctaagaat tctattgata agatttaaag ctattatcta agtagagatc ttaattttct 3060
crtgcatttt gtctagagaa atctccaactg acatactcga catgaaattt ttggtattgt 3120
gtctttgatt ctatrgcttt aargaaactg tgaacatag ggaagacatg cttaacaaga 3180
agatatratt atatatatta tatattatta atatcaacat ccttactgca gtcctgttgt 3240
gggagaaaat ggagagagac tatgtttrgt atcaattccc aaaatcaaaa aaaaaaaaaa 3300
aaaaaagtta aacaagcact cgctgttcac ttgttttaca agtattcata ctctaatagg 3360
tcattgagct tcttttcttg aggagagatc caattigaag tcggaataag attigctctc 3420
attagogtag gcaatatta tgagataaat ggtgcagcac tattaagtag tgtggatttc 3480
aatatttcc gaattagga taaatgcgct aaatagacat ccogttcrct ttggraatct 3540
gcataattct gatgcaatat ccaacaacta tttgtgcaat tatttaacaa aattccaatta 3600
acttcctraa ttagtccttc aatagaacat ctgtattcct ttttttatg aacacctcc 3660
taattaggca atcaacgaca gtaaattttg ccgaatttaa tagcttctac tgaaaaacag 3720
tggaccargt gaaaagatgc atctcattta tcaaacacat aatattcaag tgagccttac 3780
ttcaattgta ttgaagtgca agaaaaccaa aaagcaacaa caggttrrgg ataagtacat 3840
atataagagg gcctttttgtt occatcaaaa atgttactgt tcttacgatt catttacgat 3900
tcaagaatag ttgaaacaag aagattacaa actatcaatt tcatacacaa tataaacgat 3960
taaaaga                                                          3967
```

<210> 27
<211> 1728
<212> DNA
<213> Saccharomyces cerevisiae

<400> 27

```
gttattagat aagctatgaa agtcaatcct tttaatgagg aatgtaaata tgtggaatac 60
acaatttraa ccaaagtact atatatgcgt tacaagtaat ttaaattttaa gttcacggaa 120
gtaaaactaa ctgcaagatt gttacaaaga acaatgcact atttaaatca cacaatggct 180
attgaaaact gtaactgtca gaaatgctgc atgtatctat atgcatcact aagttgcgac 240
ttttaaagaaa ctttccacagt tctcaactct tctttgtgct tttcacacat tttcacaatt 300
ttccgaaatc tccaaattga aaaaaaaata aaaatacaaa aaggcaggag aagactaagt 360
attcattatt cgctgtttca taaalaaaag gataaaaagg ttaaggatac tgattaaaat 420
```

Patent Laws
visualizing innovation

http://www.patentlaws.com/


```
gtttgtcagg gttaaattga ataaaccagt aaaatggtat aggttctata gtacgttgga 480
ttcacatttc ctaaagttac agagcggctc gaagtttgta aaaatagagg cagtaaataa 540
cttgaggagt agttcatcag cagatttcgt gtccccacca aattccaaat tacaatcttt 600
aatctggcag aacccttttc aaaatgttta tataactaaa aaaccatgga ctccatccac 660
aagagaagcg atggttgaat tcataactca tttacatgag tcatacccca aggtgaacgt 720
cattgttcaa cccgatgtgg cagaagaaat ttcccaggat ttcaaatctc cttggagaca 780
tgatcccaac cgacctcata tacttatacc tggtcctgaa caagatatcg taaacagaac 840
agacttattg gtgacattgg gaggtgatgg gactatttta cacggcgtat caatgttcgg 900
aaaracgcaa gttcctccgg ttttagcatt tgctctgggc actcrgggct ttctattacc 960
gttttgattt aaggagcata aaaaggtctt tcaggaagta atcagctcta gagccaaatg 1020
tttgcataga acacggctag aatgtcattt gaaaaaaaag gatagcaact catctattgt 1080
gacccatgct atgaatgaca tatrcttana taggggtaat tccoctcatc tcactaacct 1140
ggacattttc attgatgggg aatttttgac aagaacgaca gcagatggtg ttgcattggc 1200
cactccaacg ggttccacag catattcatt atcagcaggt ggatctattg tttccccatt 1260
agrcccctgct attttaatga caccaatttg tcctcgctct ttgtcattcc gaccactgat 1320
tttgcctcat tcatcccaca ttaggataaa gataggttcc aaattgaacc aaaaaccagt 1380
caacagtgtg gtaaaacttt ctgatgatgg tattcctcaa caggatttag atgttgggtga 1440
tgaaagttat gttataaatg aggtcggcac tatatacata gatggtacta agcttccgac 1500
gacaagaaaa actgaaaatg actttaataa ttcaaaaaag cctaaaaggt cagggattta 1560
ttgtgtcgcc aagaccgaga atgactggat tagaggaatc aatgaacttt gtaggattca 1620
ttctagcttt aggctgacca agagacagac tgataatgat taaacgcttt gaatgcaaag 1680
attcaatgag attctctaag aatttctattg ataagattta aaggtacc 1728
```